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COMMUNICATIONS, ORIGINAL AND SELECTED.

To the Proprietors of the Belfast Magazine.

GENTLEMEN,

I BEG leave to request the insertion of the following description of Downpatrick, in your excellent and truly national Magazine.

Description of Downpatrick, and of its ancient Ecclesiastical buildings.*

Downpatrick is situated in a rich soil (Barony of Lecale) about 6 miles W. of Strangford bay, and 72 miles N.E. of Dublin. The town is encompassed by hills, on the E. and S. in a most beautiful manner, confining the view to a small, but pleasing extent. It is a fair, post, and borough town, and sends one member to parliament. It has a good market, well supplied with all sorts of provisions, and commands a very extensive trade from the neighbouring country. The gently rising hills of Lecale, interspersed among the fertile valleys, form a rural prospect truly captivating, and a scene extremely romantic. No country in the world of the same limits, produces greater abundance of barley and potatoes, than the barony of Lecale. This country receives considerable advantages from its contiguity to the sea, as having an opportunity of exporting great quantities of potatoes and malt. Near the town is a towering hill, which commands a delightful view. On one side is seen the river *Koil*, advancing towards the town under a noble hanging wood, called *Portallagh*, which belongs to Madam Maxwell, whose seat is distant about half a mile from this gently flowing river.† Downpatrick has long been celebrated as the burial place of St. Patrick, and has been esteemed one of the most ancient towns in the kingdom, being noted in history before the arrival of St. Patrick: its present name signifies the mount of St. Patrick, which has been given it from the *rath* which stands on the N.W. side of the town the conical height of which is 60 feet, and the circumference 2100 feet;—it is surrounded by two great ramparts, one of which is 30 feet broad, and the whole circuit of the works is three quarters of a mile. This is supposed to have been formerly the place of the palace of the Kings of Ullagh, or Down. This town is of a large compass, composed of four long streets, centering near a point, intersected by lanes and small streets. The town was formerly distinguished into several quarters, as the Irish quarter, English quarter, and Scotch quarter, &c. It was made the seat of a bishop, by St. Patrick. There are at present in this town four places of worship, viz. a Protestant church, a Roman Catholic chapel, a Presbyterian meeting-house, and a Methodist *synagogue*, which like that of the Jews, seems to stand upon a tottering basis, in consequence of the formidable artillery their reformed brethren, the *Kalhamites*, have levelled against it.

Here are some public buildings which claim our attention. The county gaol is an extensive building, the surrounding wall, enclosing a space of about 1½ acre of ground. The

* Anciently Rath Kiltair M. Duagh.

† From the same rising ground is seen at the extremity of a vale, a distant hill called Hollymount, which is covered with trees. Hollymount is the seat of Francis Savage, Esq. M.P. and is daily receiving great additions from this truly respectable gentleman, who shows great taste and propriety in his plantations. The surrounding hills command a prospect of the sea, the greater part of the county of Down, and also a distant view of the Isle of Man.

sessions-house is a large and elegant structure: its situation is extremely pleasant. A very neat hotel was erected here, by the nobility of the county of Down, who held their meetings of conviviality in it, during the assizes and races: Downpatrick has a corporation course. Among its public buildings may be ranked, an humble and well finished county infirmary, and also a nice market-house, in good repair. Here is an hospital erected and endowed by the De Clifford family, for the support of six men, and six women, inhabitants of the town, whom age and infirmity have rendered incapable of supporting an independent life. On the same establishment 12 boys and 12 girls are educated and cloathed. But what is degrading to humanity, the Roman Catholic inhabitants, whom necessity might reluctantly oblige to seek an asylum in it, are excluded. I am astonished that such distinctions should be observed in those happy days, when the sun of persecution has almost set (never I hope to rise again) and when the spirit of toleration, diffuses its benign influence, through the breast of every liberal and learned Irishman.

It is now full time, that the penal code, with all its diabolical consectaries, should be consigned to the dark mansions of eternal forgetfulness.—Ah! for God's sake, let the humble and persecuted Catholic enjoy those rights, of which he has been too long deprived. He cultivates the same soil with his Protestant brethren breathes the same air, and adores the same God, whom Protestants worship. He dwells in a land, where his forefathers enjoyed every privilege of the constitution. He contributes to maintain the prerogative of the crown, and to preserve inviolate the independence of the British Empire. He leaves his native soil, and in foreign climes, endures the fatigues of a camp, and risks his life to retard the progress of French usurpation and despotism. And why, I ask, is he to be deprived of the common rights of mankind? The reason is obvious;—it is because he professes the Roman Catholic religion. I flatter myself, that those gentlemen, who hitherto have been so illiberal, and I will venture to say, so unconstitutional in their measures, will reflect on the conduct. I hope that by their future liberality and justice, they will be able to draw a veil of oblivion over that stigma which has been justly stamped upon their characters. I could wish to pursue this subject further, if it did not exceed the limits of my undertaking, but I hope, enough has been said, to convince those gentlemen, for whose instruction those remarks have already been made, of their erroneous principles.

I shall now come to a description of the ancient ecclesiastical buildings of Downpatrick.

Abbey of Canons Regular.

This stands near the town, at the ascent of a hill, and was founded by St. Patrick, whose remains were interred therein A.D. 493.

A.D. 583, Died the Bishop, St. Fergus, his feast is observed on the 30th March.

785. Died the Abbot Dungal, the son of Laogar.

940, The Danes plundered and burnt this town, as they likewise did in 942, and 988.

1015, Died the Abbot, Clernaich, and the same year the Danes destroyed the town.

1040, The Danes continued their cruel ravages, and repeated them in 1069.

1101, Magnus, King of Norway and Man, was interred in this Abbey.

1111, The town was again destroyed by the Danes.

1183, The secular Canons were turned out of this Abbey, by Sir John de Courcey, who placed therein Monks of the order of St. Benedict, from the abbey of Werburgh, in Chester. In several different charters, Sir John makes them various grants. In one, for the health of the souls of his father and mother; all his predecessors and successors, or of all that had died, or should die in his service, he granted the ferry of the Lough of Strangford: he granted also the ferries of Carlingford, Carrickfergus and the Bann. In another he granted the tythe of all his hunting throughout the whole lands.

The Bishop Malachy, granted to

this Abbey the revenues arising from 36 townlands in the barony of Lecale.

1185, The bodies of Sts. Patrick, Columb,* and Briged†, were discovered in this abbey, with the following epitaph written over them;

"Hi tres in Duno tumulo tumulantur in uno,
Brigida, Patricius, atq: Columba Pius,"

"In Down one grave do fill
Patrick, Briged, and Columb Kiln."

Another Epitaph, by the late H. Dawson Lawrance, esq.

One tomb contains the freeman and the slave,
The crafty statesman, or designing knave.
Not so, fair down, within thy walls is found
One sacred spot—still hallowed be the ground,
Where Bridget, Patrick, pious Columb lie,
Their dust remains, their souls have sought the sky.

*Columba commonly called Colum-Kill, a descendent of the family of the Kings of Ulster, his father's name Connel, hence Tirconnel. Agreeable to the spirit of the times, he devoted himself to the study of the ancients, and of divinity; he founded a monastery or place of education called Dermach, in Ireland. He soon perceived many of the Irish teachers of religion longed for the possession of the riches and grandeur enjoyed by the priests of the Latin church, at the expense of freedom of inquiry and liberty of conscience in religious matters. He removed from the corruption and vanity which began even then to prevail in his native country, in the 6th century, to the island of Hy, or Jona, in the North parts of Britain, retired from the corruptions of the world. He there founded a place of Education, from which many eminent men were sent to different parts of the world, who taught Christianity agreeable to the doctrines of the Old and New Testaments. He ended his days, which had been spent in promoting the interest of religion, and liberty, in the 75th year of his age, A.D. 597, and was buried in the yard of the chapel of his college, in Jona. The Irish historians relate, that his bones were afterwards removed to Down, and buried with those of St. Patrick.

† Bridget, Brigid, or Bridgid, was daughter of Dubtagh, of the County of Louth, the consequence of an unlawful amour; she founded many convents, particularly that of Kildare, about the year 480. She died and was buried in her nunnery about the year, 521 in the 70th year of her age. Her Historians relate that her bones were removed from Kildare to Down, and entombed with those of St. Patrick.

1186, Bishop Malachy, and Sir John de Courcey, sent an embassy to Pope Urban III. to obtain a bull for the translation of those sacred reliques; and on the 5th of June in the same year, a solemn translation was accordingly made by the Pope's Nuncio.

1201, Bishop Malachy, the great benefactor of this abbey died.

1210, Sir John de Courcey, the conqueror of Ulster, yielded to fate.

1276, The prior Nicholas, was made Bishop of Down.

1316, Edward Bruce, at the head of his army of Scots, destroyed this abbey.

1327, Thomas Bright, Bishop of Down, and late prior of this abbey, died and was interred here.

1442, William Stawley was prior.

1526, The prior Glaisne, who was also abbot of Saul, and son of Hugh M'Gennis, was slain by the sons of Donnell M'Gennis.

1538, Leonard, Lord Grey, Lord Deputy of Ireland, burnt this church, defaced the monuments of Sts. Patrick, Columb, and Briged, and was guilty of many other sacrilegious actions, which fill the soul with indignation. The profanation thereof being one of the articles of impeachment laid to his charge, he was beheaded three years after. Such is the fate of all those, who wantonly insult, and wish to destroy sacred buildings, dedicated to the service of the Lord,

This monastery with all its appurtenances, was afterwards granted to Gerald, Earl of Kildare. This sacred building during the lapse of many years, protected from the unfriendly storm, by the kind embrace of the tenacious ivy (the sacred badge of antiquity) and the habitation of the owl, exhibited a venerable and pleasing aspect. It often attracted the wearied traveller's step. The roof was supported by five handsome arches, which composed a central aisle of 26 feet in breadth, two lateral ones

of 13 feet each, which yet remain. The heads of the pillars and arches, the tops of the windows, and many niches in the walls, were adorned with a variety of sculptures. At the east end is a very lofty and magnificent window, and over it are three niches, where formerly stood the Saints Patrick, Columb, and Briged. Adjoining the east end, were two square columns, in one of which was a winding stair-case leading to the roof. This stair-case is at present entirely demolished. Near the abbey was a round tower, which stood at some distance from the cathedral, 66 feet high, the thickness of the walls 3 feet and the diameter on the inside 8 feet. This tower was taken down, in order to enlarge the west end of the cathedral, and in its place is erected a steeple, which remains as yet unfinished. It is remarkable that under the foundation of this tower, were found the vestiges of a more ancient church, of exceeding good mason work, and on a larger scale than the present structure, in the walls of which were many pieces of cut stone, that have evidently been used in some former building.

In the year 1788, the Marquis of Downshire, received immense contributions in order to convert this memorandum of St. Patrick, into a Protestant cathedral. Several efforts have been since made to complete it, which as yet appear inadequate to produce the desired effect.

It is remarkable that the workmen employed in repairing this church, in the year 1789, discovered a stone coffin, the inscription of which was obliterated by the consuming hand of time, and found the bones of a skeleton firm, and most of them adhering together, in the same posture, as when interred. On the legs appeared boots very fresh. The length of this skeleton was above 7 feet. Many other ancient and venerable monuments were discovered at the same time. It was a sight truly distressing to the inhabitants to see the bones of their ancestors thus disturbed, cast up, and exposed to the malignant fury of the brute creation. Here nature demands a tear of sympathy.

Priory of Regular Canons.

This was called the priory of the Irish, and was founded in honour of St. Thomas in the year 1138, by Malachy O'Morgan, who died A.D. 1148.

1265, William Reed was prior, and resigned in the year 1276.

The site and precincts of this priory, with the appurtenances and eight acres of land, a carucate* in Gransnecam, &c. were granted to the Earl of Kildare.

Cross Bearers.

The priory of St. John the Baptist in this town, called the priory of the English, was founded by Sir John de Courcey, in the 12th century, for Cross-bearers, following the order of St. Augustin.

1210, William was prior, for we find him a subscribing witness to Sir John's charter, to the Black Abbey, and the knight died sometime before this year.

1293, The prior, William Rufus, being deposed, a license was granted, dated April the 6th, to proceed to elect in his room.

This priory with all its appurtenances, and one acre within the site, two carucates in Ballywodan, and a carucate in Carricknab were granted to Gerald, Earl of Kildare.

Abbey of Cistertian Monks.

This abbey was founded in the 15th century, but the records of it are entirely lost.

Abbey of Cistertian Nuns.

The records of this nunnery cannot be found.

Franciscan Friary.

This monastery which was founded about the year 1240, by Hugh de Lacy, Earl of Ulster, is said by some to owe its foundation to Africa, daughter of Godred, King of Man, and wife to Sir John de Courcey.

This monastery and its appurtenances, with one acre within the site, several carucates in Magheralegan,

* *Carucate* from an old French word, *carue* for *Charrue*, a plough, hence carucate signifies a plough land, containing so much as could support a plough of oxen, with all necessary appendages; in Elizabeth's time, it contained 100 or 120 acres.

Bellylarge, Ballystrue, called Russel's lands, with an acre, called Cronage, were granted to Gerald, Earl of Kildare.

Leper's Hospital.

This hospital was dedicated to St. Nicholas, and with the hospital of St. Peter at Kilclief, was on the 20th of April, 1413, granted in custody to John Young, John Mullan, and Walter Ceyley, with all their lands, tenements, and appurtenances, being then in the King's hands for certain causes, to hold the same as long as they should continue in his Majesty's possession.

N.B. These antiquities have been selected from the most authentic sources. I am yours, &c.

DUNENSIS.

For the Belfast Monthly Magazine.

TOPOGRAPHY.

BLESS me, what a fine prospect is this! said Miss Emily Mild as she gained the summit of the hill; why I have never heard of this place before, and yet I have seldom seen any more deserving the attention of the traveller. Since we are so much pleased by the sight and description of other countries, why are we so careless of our own?

Such were the words of Miss Emily as she contemplated the scene.

She beheld the Neagh with all his waters stretch afar to the South; not circular like some solitary lake of the mountain, but great as the parent of rivers. His waves were not rolled in tumult, as when the loud blast of winter rages when his waters are spread abroad, and his billows vie with those of Ocean, but the mild decending sun played upon his placid surface, which was calm as the soul of the lovely admirer.

She inquired what were those mountains, which raised their heads far distant as the eye could reach; these, said Mr. Goodwill, are the mountains of Mourne; and that, I believe, is Slieve Donard, loftiest of our northern Hills. You may see, though our situation is not much elevated, part of the counties of Antrim, Down, Monaghan, Tyrone, Armagh, and Derry. You see on the opposite side of the lake the lofty mountains of Derry, which range from north to to south, through the entire length of the county. The dark brown heath covers their sides, and the clouds seem to rest on the top where the soaring eagle has built his nest, and looks down from his inaccessible rock.

The highest is Slieve Galen, famous even yet, for an annual festival held on its top; where each visitor brings a stone which he casts upon a heap or cairn, visible even at this distance. Cultivation appears as if cautiously ascending towards their summits, and where the wild fowl once lodged in the moor, the harvest now yields to the sickle; nearer you may perceive that round hill; it is Knockclochrune, so famous for its fairy castle; where to the certain knowledge of many, the wonderful transformation was wrought on the bodies of Darby Lunchaghan, and Teague O'Lagan, which our countryman Parnell has rendered famous in the well known story of Sir Topaz.

But I would wish, said Miss Emily, to know something of those places that are nearer. Are not these two lakes connected by a river? "They are" and that lower one is called Lough-beg, or the little Lake. The river Bann, which takes its rise in the mountains of Down, flows into Lough-neagh; whence issuing, it again joins Lough-beg, and passing through seeks its course to the sea.

At yon rising town, situated between the two lakes, there has been built at the sole expense of a late lamented nobleman, a bridge, now one of the most useful and ornamental in the kingdom. The emperors of the world are remembered by such works, and conquerors have counted them an addition to their glory; but not a stone—not a stone tells who, or what he was, to whom we owe that magnificent structure. Stones would, however moulder to dust; but believe me O'Neil has left a more lasting memorial; for many are they who will tell, who was the friend of the distressed.

He is gone! but his memory is sweet; and to practise equal virtues will ever entitle to equal praise.

Passing over the bridge you enter into that extensive plain; it is called Creagh, and contains upwards of 2000 acres of fine meadow; the hay ricks, scattered over it, appear almost numberless, whilst they beautifully display the blessings bestowed by the hand of Industry.

The two lakes appear to have been originally one; and that entire flat to have been formed by the waters, as it is composed of regular strata of sand, bog and chalk; which last, in many places, is found uppermost, and is, by a process of bleaching, rendered almost completely white. Were you here in winter, you might see the whole covered with water, except two highways that extend from the bridge; and where now there is a dry firm soil, there the fisherman fills his net by means of which and a little cot (boat) he in part supplies the wants of his family. Where now the cattle browse plentifully, there the white birds of ocean will soon seek their watery prey; and the diver from the frozen isles of the north, tempt abroad the early fowler, who sees the majestic swan raise her lofty neck far distant from the treacherous shore. This spreading of the waters however gives surprising fertility to the soil, which appears as if emerging from their surface in the spring.

It has been thought by some Quixotic adventurers, that if a passage were cut sufficiently wide for the waters, this inconvenience might be avoided, and many advantages gained. But granting that a passage might be formed for all the water that runs into a lake of such extent, by cutting a boggy soil for some miles, and several beds of rock, clay, &c. yet still I believe all its consequences have not been considered. The lake is full of shallows; to take off much of its water, would in summer, ruin the navigation; during which time (even in its present state) it is not practicable to sail a boat of a few tons burthen, so far as the bridge; but this is not all the evil: I, myself, once talked on this subject to Mr. Farmer, a gentleman well acquainted with the nature of these meadows, some of which may be worth six guineas per acre; he stated that this fertility was entirely owing to the overflowing of the water, which, if taken away from the chalky soil, would render it useless even for cultivation, and supposing cultivation practicable, yet it is of three times greater value in its present state. Farther, to show the useful effects of the annual overflowing, he observed, that in such seasons as the water did not attain its usual height, the parts uncovered did not produce the usual quantity; and that on such places as were rarely covered, the produce, at best, was but trifling.

Mr. Goodwill then proceeded to point out and name the villages which appeared on the opposite shore; at such a distance, they were only to be distinguished by the spires of their churches. It yet remains, said he, to consider a little more attentively the beauties of the lakes.

Lough-neagh is chiefly distinguished by the extent of its waters, and the lofty mountains by which it is surrounded.

Lough-beg, you may perceive, is by far the most beautiful, to which its irregular shape, and variety of shore, not a little contributes; here is the wood, there the reedy marsh, the cultivated fields; and yonder the bold and rocky shore forms a barrier against the encroaching flood. Upon its opposite bank you see yon large building. It is a castle, I suppose, said Miss Emily. It was but a few years since, said Mr. Goodwill, when all that land surrounding it, was occupied by the cottages of the humble peasant. Taste and opulence saw the situation, and the arts raised yon majestic pile. Perhaps a more commanding site was never chosen, except another on the northern coast, where the lordly palace looks over the prostrate Atlantic, that hurls its waves almost to its base, which appears guarded by a temple from their impetuous fury. This which you now behold is called Ballyscullion. There the painter gave animation to the canvas, and the statuary almost motion to the marble; magnificence gazed astonished at her own beauties, and said, sure this is a residence for a king. The woods arose as if obedient to the

word of their lord, and plenty smiled around. They are gone; they have sounded beneath the ax, and their place is desolate. The windows of the palace are broken, and the winds howl through the empty hall. The roof is removed, and the tempest is no more excluded. The daw sits on the top, and builds his nest undisturbed.

At a distance, its grandeur appears to remain, but on a nearer approach you behold its mouldering ruins. Yet its foundations are not old. So some lovely daughter of beauty arises with all her kindling charms; she blooms for a while, and every heart is on fire: Death arrests her in the middle of her course, and every eye is in tears.

That wood which indents the southern end of the lake, is called Creagh-bog, and though only composed of low bushes, yet, at a distance, has all the beauties of full grown trees. Nearer to us, on the eastern shore, you see, where imbosomed within that wood stands Raymond cottage. Here the sylvans appear to have delayed, to take a last view of our country before they forsake it for ever. Here, when the sun rages in summer's heat, Contemplation might dwell, where Silence is all around, and the shades of the lofty oak afford a secure retreat from his beams. In vain do the howling blasts of winter attempt to drive him from his loved retreat, for a cottage in all the elegance of rusticity opens its doors to receive the welcome guest.

Here, retiring from the hurry of the world, the patriot, the friend of his country (and of such she has need) may reflect in solitude, on the blessings which the great can bestow, and feel the pleasure of making thousands happy.

This lake, continued Mr. Goodwill, contains a number of islands, the largest of which is the Church-island, so called from the ruins of an ancient church. Of this place there are many remarkable things told; it is well worth seeing, and many years since, was visited by two strangers, very odd fellows; it was said, they were accompanied by an old acquaintance of mine, called Jonathan Simple, who (I was told, when last in this country) was going to write an account of their journey. Jonathan's character was like his name—his account, however, if written, may be worth inquiring after; and as his house lies on our way, and is not far distant, it will be easy to learn the truth of it.————Alas! and is he dead? He is, said Mrs. Simple; here, however, are some of his papers; you should have had them all, but young Jonathan has made the rest into a kite—emblem of the writer's head—It is but short, said Mr. Goodwill, and may be read before supper.

JUVENIS.

For the Belfast Monthly Magazine.

AN ESSAY ON WITCHCRAFT.

"Whate'er's in spells, or if there witches be;
Such whimsies seem the most absurd to me."

GREAT as the progress of civilization has been during the last century, and much as reason has triumphed over superstition throughout that period, the whole is far from being eradicated, and in nought is it more visible than in the belief concerning witchcraft, and cows losing their milk, or butter, by charms and incantations. This very absurd notion is still pretty common, for many districts yet have a "Moll White," and of course a "Mary Butters," or some person very skilled in charms, to counteract her diabolical designs upon the cattle; which are very seldom believed to fail of their usual quantity of milk, from any cause but witchery, &c. It is truly surprising that any person possessed of rational understanding should believe it possible for milk to be taken from a cow without touching her; more especially to leave the milk and deprive it of butter, for numerous are the stories told of such deeds being done,

"When Tibby kirn'd, and there nae butter came."

The late dreadful catastrophe, in Carnmoney, I thought would have annihilated such superstition, at least in this part of the country, but it seems to have had the contrary effect on those who entertain these strange

opinions; they say some part of the charm had not been properly wound up, therefore the delinquents when forced to appear, were enabled to take vengeance, in the most summary manner, on those whom they found counteracting their infernal purpose. It is singular that those said to be adepts in this mystic art should be generally old women, who are said to have sold themselves to the devil to obtain a part of his art; they are certainly stupid agents, and stupid the devil is if he employs such agents. Those who believe in such nonsense, say, certain times are more dangerous for witching than others; May-day is accounted very ticklish, as letting fire be taken out of the house, on that day would cause some disaster; letting fire be taken out when churning, or making cheese, is also reckoned very unlucky. I have remarked that a large portion of those people are observers of omens, and are raised or depressed in spirits, as they operate on their disordered fancies; for as a late eminent author has justly observed, "if you are pleased with prognostics of good, you will be terrified likewise with tokens of evil, and your whole life will be a prey to superstition." To reason with such people as the fore-mentioned is of no use, for if you contradict any of their favourite errors, they instantly call you an unbelieving infidel, or some such term; as a proof of this assertion I insert the following anecdote. Being in a friend's house a few days after the melancholy affair in Carnmoney, the discourse, of course, was concerning warlocks, &c. One of the persons present, was, if possible, confirming the others in their belief, by briefly relating the story of the woman of Endor. When he had done speaking, I remarked that there was no proof in scripture of that woman being a witch, but rather the contrary; the person who appeared, being really Samuel, as was evident from the woman being frightened at his appearance, and the words, "And Saul perceived it was Samuel." I added it was plain she was a juggler, and that his appearance was unexpected by her, and must have been by the power of God; for who, continued I, can believe that a witch, if she really had been such, could have power to raise up a prophet of God from the dead. Those remarks seemed both to surprise and exasperate the whole company, they looked at each other for some time, in silence, the former narrator at length said, he would not argue with a person who denied the very scriptures, for it was plain I was a disciple of Tom Paine's. The latter part of this sentence was very consequentially delivered, and had all the effect he could have wished upon the hearers, who seemed to gain fresh enthusiasm from his words, and exclaimed, "O, you are perfectly right, never argue with one who makes a jest of the scriptures, and denies every thing that is sacred human or divine!" I now perceived it was in vain to reason with such a group of fanatics, for "enthusiasm and superstition are the weaknesses of human reason;" considering them labouring under these infirmities, therefore rather objects of pity than anger, I left them to enjoy their imaginary triumph. According to these whimsical people it is very difficult to guard against charms, &c. as they are oft communicated by the eye, in what is commonly called, the blink of an ill, or evil eye; by this power alone, cows are said to be deprived of their milk, &c. even the human species are said to suffer by this charm. In several parts of England this superstition is prevalent, but there it is necessary for the witch to repeat thrice, I wish, but here, it is said to be done in a moment without any previous words. Second-sight, or the power of seeing things before-hand, I believe is not claimed by any, save the scottish highlanders, a poor illiterate people; although this gift (as it is termed) is rather sanctioned by several authors, I must still consider it as more wild and fantastick than any of the former. The belief of witchcraft is pretty common in most parts of Scotland; a late tourist mentions a person who carved pieces of wood in a curious manner, to be kept in cow-houses as a preservative against charms, and every species of witchery. Mr. Boswell, also mentions a Mr. M'Queen, a minister of a parish, who

preached against such nonsense, with great success; he gave any person leave to take the milk from his cows, provided they did not touch them, this had such an effect, that not the least vestige of this superstition, in a short time remained in the parish. I really think a series of such lectures would be very useful in most parishes, and attended with the same beneficial consequences. The late event at Bramley, near Leeds, and the execution of the impostor Mary Bateman, is a striking instance of credulity, but of too recent a date to require insertion here. However, those wild opinions are decreasing very fast, and there is every reason to believe that at the conclusion of the present century there will be "scarce a wreck behind."

C. Fergus. S.M.S.

To the Proprietors of the Belfast Magazine.

WILL you venture to publish the following letter of just remonstrance, written to Thomas Paine, some years before his death, by a worthy friend of mine in England? For justness of sentiment and energy of expression, I can recommend it to the true friends of philanthropy.

"*Dear Sir*,

In retiring from the revolutionary scenes of Europe, you will not, I trust, retire from those labours which are now strongly agitating the human intellect, and making oppressors tremble. While enormity is the growth of every soil, and while crimes, sanctioned by law, are suffered to blur the fairest institutions of mankind, powers such as you possess can never want employment. Pregnant with the purest political wisdom, you contributed in no small degree to emancipate the people of America from the proud domination of Britain, and you are now called upon in the name of suffering humanity, to aim at rescuing one part of that very American people, from the abominable grasp of the other. With tyranny, in whatever garb he may appear, you have waged perpetual war; and surely there cannot be a tyranny more truly execrable, than that of the republican planter lording it over his toil worn, lacerated slaves. Turn your attention then, to the southern states of the American union, and there among a people who have fought, and who have bled in defence of their own liberty, you may delineate the dark, and melancholy features of Negro slavery. Who, that is not familiar with wrong, could behold one of these pigmy despots, in the midst of his rice or tobacco plantation, without reprobating the government that can authorize such a system? Who that is not inured to outrage, could witness the incessant toil, the frequent exercise of the twisted thong, the Osnaburgh frock stained with human blood, and the sable countenance marked with inutterable anguish, without detesting the wretch, who tremblingly alive with respect to his own rights, can yet become the cruel violater of the rights of others? Who that is not an habitual hypocrite, could follow the democratic slave-holder to the legislature of his country, and hear him declaim on the rights of American citizens, on violated constitutions, &c. without the strongest sensations of loathing and disgust? Or in short, who, that has the feelings of a man, could behold this complicated villainy, without adopting your own indignant assertion, "that tyranny and martyrdom, like taxation and representation, ought to go hand in hand?" To ameliorate the situation of man is evidently the object of your writings; and whilst your favourite America can exhibit such atrocities, it is impossible, I again repeat it, that powers such as you possess can ever want employment. The man who is truly a philanthropist, will ever be consistent; he cannot possess one class of feelings for white men, and another for negroes; no! his arms embrace the universe and all mankind are his brethren. From the head of the Chesapeak to the borders of Florida, and from the shores of the Atlantic to the banks of the Mississippi, is a widely extended region, in which you may have many admirers, who would no doubt take it in dudgeon, were you to appear inimical to their miscalled interests; yet notwithstand-

ing this, I firmly believe that you will not inhabit a country, in which man is allowed to be the property of man, without becoming the enemy of the oppressor, and the fearless advocate of the oppressed. As the clear and energetic champion for broad and general liberty, you have not a superior in the annals of mankind, yet through the whole of your writings, I do not recollect a single passage that is particularly pointed against the slavery of the negroes — It is a subject that calls for intellect, gigantic as your own: it is an Augean stable, fit only for such an Hercules. Let me entreat you then, in the name of that liberty which you prize above all price, once more, to vindicate the rights of injured nature, and to show, that no laws, no affluence, no authority, can shelter the proprietor of human sinews, from the scorn and contempt of a regenerating world. Against you there is not an epithet in the vocabulary of baseness which will not be employed; yet in advocating the cause of negro wretchedness, your powers must prove irresistable."

In communicating a copy of this letter to me, my friend thus wrote in the year 1807.

"I congratulate you on the abolition of the slave trade, and have inclosed you a letter, which some time ago I addressed to Thomas Paine, on the subject of Negro slavery, in the United States. Since his receipt of this, he has frequently sent me his verbal respects, but will not commit himself to paper on the subject. In 1791. Thomas Paine conversing with a gentleman on the subject of of the slave trade, wondered that God Almighty did not send a thunderbolt to blast the d———d town of Liverpool, yet Thomas Paine now resides in the State of New York, surrounded by Negro slaves without either writing, or uttering a syllable against Negro slavery, though he may daily read such advertisements, as the following; "For sale, a well looking Negro woman, about 23, with or without her child of four years old; apply to the proprietor" I wish politicians and philosophers would learn to be consistent. Jefferson, the president of the United States, the freest country in the world, holds hundreds of his fellow creatures in a state of bondage. Horne Tooke, the celebrated English patriot, is an enemy to the abolition of the slave trade, and Cobbett, the redoubted Cobbett, has been the uniform advocate of Negro slavery!!!"

Such sentiments, do honour to the head and heart of the writer, and tend to communicate a spark to electrify and energize congenial minds.

K.

For the Belfast Monthly Magazine.

ON THE PAPER ENTITLED, SCOTCH LAW AND POLITENESS.

THE paper inserted in the last number of the Belfast Magazine, entitled Scotch law and politeness, deserves notice for two or three particulars. In the first place the behaviour of the Scotch magistrates is doubtless reprehensible in the highest degree, and when so many of them concurred in the same line of conduct it may in some sort be esteemed a national disgrace. Want of politeness, is too mild a term for behaviour, in which a deficiency of common humanity and information, is so prominent, as in that of this "Scotch compaction of justices," to use their own uncouth terms; particularly for that of the justice, or rather unjustass, who kept the gentlemen exposed to the rain while he was breakfasting at his ease.

But on the other hand it is evident, the gentlemen themselves were to blame, in being too hasty, and over severe in the exaction of their rights, and were peculiarly imprudent in being so in a strange place, where it appears our country is not held in too much esteem.

Let them reflect how much trouble and vexation they would have saved themselves by sending, or going to the first man they engaged, to terminate their bargain with him, before they hired a second; their omitting to do so, and taking the method they adopted, though it was according to their right, yet it was a strictness of right bordering on the *summum jus*, which all know to be *summa injuria*.

The man might besides, have been detained by some unexpected accident, or misfortune, and a little of that "milk of human kindness," which our countrymen are seldom deficient in, when they are not irritated, should have induced them to make some inquiry as to that point, before they proceeded farther.

They should besides have considered that, coming from a country where strict punctuality, the writer is sorry to own, is not over common, they ought to have been more indulgent to the failings of our neighbours, in this point.

The man who sets forward in life, with a resolution to exact his strict right, in every particular to its utmost limits, will have pretty much such a journey through it, as those gentlemen, had across the neck of Scotland; and if they consider the matter in this light, they may receive ample compensation for what they suffered, in the ease with which the lesson they have thus learned, may enable them to travel either literally on terra firma, or metaphorically, through the pilgrimage of existence.

Or at least if they do not, the remark may perpaps have this good effect on some of the readers of the Magazine, and if it has, the view of the writer will be answered which is in showing by this example the great advantage which the good old rule of "*to bear and forbear*," may be in ensuring a pleasant passage through the world, to contribute his mite to the sum of human happiness. The man who despises this rule will be sure to feel the curse of Cain." "His hand will be against every man and every man's hand against him."

N.

To the Editor of the Belfast Magazine.

SIR,

BY inserting the following, you will oblige a Correspondent.

I have frequently observed that our fires which are composed of turf, burn better at night, than in day light, this is the case when lime is burning, or bog lands, more especially, if it is in time of frost: in consequence of this the farmer is sure to attend the burning of his bogs, if he has any, at night, because his fires burn better, this he does without knowing the reason why it is so. It is known that the solar light extinguishes our fires, and retards their burning; but the above will be the case, even when the sun is obscured by clouds for many days together. *Quere*—the reason.

T.

Ballinahinch, Nov. 10, 1809

For the Belfast Monthly Magazine.

THOUGHTS ON FRIENDSHIP.

Poor is the friendless master of a world;
A world in purchase for a friend is gain.

YOUNG.

THERE is no luxury so great; nor any to which men in all situations have more equal claims, than that of Friendship; but alas! how little do we reflect on the importance, or, how poorly do we appreciate the advantages resulting from it; no person at the time he professes friendship, but imagines he is possessed of all the requisites which constitute it, hence, the frequent exclamations of ingratitude, treachery, and hypocrisy which ever resound in our ears; hence, the person "hackney'd in the ways of men," looks on the world with a distempered, suspicious eye, thinks mankind only a compound of craft, and dissimulation, and because of his experience, never tastes the assuasive cordial with which Heaven has blended the bitter draught of worldly enjoyments.

How widely different would be our situation in this world, did we, first study ourselves, eradicate every unfavourable propensity from our hearts, cultivate every disposition that would encrease our own and our neighbour's happiness—and be careful never to give the imperative influence, or title of a bosom friend, to one whose age, pursuits, situation, and qualifications are not exactly corresponding with our own—not to have many friends, and to be extremely choice in our selections, that those may have our unbounded confidence, and justly merit our esteem—that when we have found this pearl of inestimable value, we should never give scope to our

versatile inclinations, but love with unabated ardour to the end of our lives. But these as Cowper says

Are observations on the case
That savour much of common place,
And all the world admits them.

what a pity! the minds of the world were not also actuated by them: Then meretricious attainments would be of little value, and mental qualifications only in estimation; man would meet man, without any of the cool reserve which is so observable; and be esteemed in proportion as he is virtuous. S.

Ballymena, Nov. 14th, 1809.

To the Proprietors of the Belfast Magazine..

I SOMETIMES hear your magazine stigmatized as dull: but while you continue to make it useful, you need not fear departing from the plan of some of your contemporaries; in time the taste of your readers may be reclaimed from the frivolities, which they have been accustomed to see in periodical publications, and learn to bear a mixture of the useful. Persevere steadily in the plan you have adopted, and generally adhered to, and venture to communicate common sense. Some may be disgusted, but the number of sensible readers will be increased—Your attention to instruct from time to time in the plans for restoring suspended animation is deserving of encouragement. In aid of your plan I send you the following observations with which I lately met on the subject. They are from the Suffolk humane society. Besides the useful though common observations in the first four paragraphs, I would particularly recommend the important information in the next four. They point out an enlightened method of treatment. A READER.

Suspended Respiration.

Cases of suspended respiration from drowning frequently occur where no medical assistance can be immediately procured, and many valuable lives are in consequence lost from improper treatment, which might have been preserved, had more appropriate means been used.

The Suffolk Humane Society to prevent, as far as possible, the occurrence of the like fatal consequences in future, recommends the following directions to be observed, till medical assistance can be obtained.

As soon as the body is taken from the water, convey it with the head and shoulders raised, to the nearest house, having first untied the neck-cloth and removed every impediment to respiration; then strip off the clothes, wipe the body dry and carefully clean the mouth and nostrils.

Place the body (the head still raised) on a bed or upon blankets, on a low table, in a warm but airy room in winter, or in the sun in summer.

Six persons are as many as can be usefully employed, and not more than that number should be admitted into the room.

Let one person close the mouth and one nostril: an other press the lower end of the prominent part of the wind pipe (called the pomum adami) backward, while a third blows into the open nostril by means of a pair of bellows, till the chest be a little raised; the air should then be allowed to escape, and its expulsion assisted by gentle pressure on the chest, after this process has been repeated three or four times, rub the whole body and particularly the right breast, with oil or hog's lard, which will prevent the ill effects of friction.

This plan should be continued for at least four hours, warmth being at the same time applied to the feet and hands by means of bladders or bottles of warm water, or hot sand bags; if a warm bath can be procured, the patient may be with advantage, immersed in it up to the shoulders, as whatever tends to preserve the warmth of the body, without vitiating the air, is useful.

As soon as a pulse at the wrist, or beating of the heart can be felt, stimulate the inside of the nostrils by touching them with spirit of hartshorn, or sal volatile, and inject by means of an elastic tube or syringe (if the person be unable to swallow) a spoonful or two of warm wine, brandy, rum, or gin and water,

and repeat it every five or ten minutes, till a wine glass or two has been consumed. When the natural respiration is restored, put the person in a warm bed, and suffer him to remain quiet.

All rough treatment, such as rolling the body on casks, holding it up by the heels, &c. should be carefully avoided.

Medical assistance should in all cases be provided as speedily as possible.

For the Belfast Monthly Magazine.

The following Report of the Medical Committee of the Jennerian Society on the subject of Vaccination, has been subscribed by 21 Physicians, and 29 Surgeons of the first eminence in the Metropolis; and has been ordered to be printed and circulated among the members of the Society. It is inserted here, with a view to its more extensive circulation.

THE medical council of the Royal Jennerian Society, having been informed that various cases had occurred, which excited prejudices against vaccine inoculation, and tended to check the progress of that important discovery in this kingdom, appointed a committee of twenty-five of their members to inquire, not only into the nature and truth of such cases, but also into the evidence respecting instances of small pox, alleged to have occurred twice in the same person.

In consequence of this reference the committee made diligent inquiry into the history of a number of cases, in which it was supposed that vaccination had failed to prevent the small pox, and also such cases of small pox as were stated to have happened subsequently to the natural or inoculated small pox.

In the course of their examination the committee learned, that opinions and assertions had been advanced and circulated, which charged the cow pox with rendering patients liable to particular diseases, frightful in their appearance, and hitherto unknown; and judging such opinions to be connected with the question as to the efficacy of the practice, they thought it incumbent upon them to examine also into the validity of these injurious statements respecting vaccination.

After a very minute investigation of these subjects, the result of their inquiries has been submitted to the medical council; and from the report of the committee it appears:

1, That most of the cases, which have been urged in proof of the inefficiency of vaccination, and which have been the subjects of public attention and conversation, are either wholly unfounded, or grossly misrepresented.

2, That other cases, brought forward as instances of the failure of vaccination to prevent the small pox, are now allowed, by the very persons who first related them, to have been erroneously stated.

3, That the statements of the greater part of those cases have been already carefully investigated, ably discussed, and fully refuted, by different writers on the subject.

4, That notwithstanding the most incontestible proofs of such misrepresentations, a few medical men have persisted in repeatedly bringing the same unfounded and refuted reports, and misrepresentations before the public, thus perversely and disingenuously labouring to excite prejudices against vaccination.

5, That in some printed accounts, adverse to vaccination, in which the writers had no authenticated facts to support the opinions they advanced, nor any reasonable arguments to maintain them, the subject has been treated with indecent and disgusting levity; as if the good or evil of society were fit objects for sarcasm and ridicule.

6, That when the practice of vaccination was first introduced and recommended by Dr. Jenner, many persons, who had never seen the effects of the vaccine fluid on the human system, who were almost wholly unacquainted with the history of vaccination, the characteristic marks of the genuine vesicle, and the cautions necessary to be observed in the management of it, and were therefore incompetent to decide whether patients were properly vaccinated or not, ne-

vertheless ventured to inoculate for the cow pox.

7, That many persons have been declared duly vaccinated, when the operation was performed in a very negligent and unskilful manner, and when the inoculator did not afterwards see the patients, and therefore could not ascertain whether infection had taken place or not; and that to this cause are certainly to be attributed many of the cases adduced in proof of the inefficacy of cow pox.

8, That some cases have been brought before the committee, on which they could form no decisive opinion, from the want of necessary information as to the regularity of the preceding vaccination, or the reality of the subsequent appearance of the small pox.

9, That it is admitted by the committee that a few cases have been brought before them, of persons having the small pox, who had apparently passed through the cow pox in a regular way.

10, That cases supported by evidence equally strong, have been also brought before them, of persons who after having once regularly passed through the small pox, either by inoculation or natural infection, have had that disease a second time.

11, That in many cases, in which the small pox has occurred a second time, after inoculation or the natural disease, such recurrence has been particularly severe, and often fatal; whereas, when it has appeared after vaccination, the disease has generally been so mild, as to lose some of its characteristic marks, and in many instances, to render its existence doubtful.

12, That it is a fact well ascertained, that in some particular states of certain constitutions, whether vaccine or variolous matter be employed, a local disease only will be excited by inoculation, the constitution remaining unaffected; yet that matter taken from such local vaccine or variolous pustule is capable of producing a general and perfect disease.

13, That if a person, bearing the strongest and most indubitable marks of having had the small pox, be repeatedly inoculated for that disease, a pustule may be produced, the matter of which will communicate the disease to those who have not been previously infected.

14, That although it is difficult to determine precisely the number of exceptions to the practice, the medical council are fully convinced, that the failure of vaccination, as a preventive of the small pox, is a very rare occurrence.

15, That of the immense number who have been vaccinated in the army and navy, and in different parts of the United Kingdom, and in every quarter of the globe, scarcely any instances of such failure have been reported to the committee, but those which are said to have occurred in the metropolis or its vicinity.

16, That the medical council are fully assured, that in very many places, in which the small pox raged with great violence, the disease has been speedily and effectually arrested in its progress, and in some populous cities almost wholly exterminated, by the practice of vaccination.

17, That the practice of inoculation for the small pox, on its first introduction into this country, was opposed and very much retarded, in consequence of misrepresentations and arguments drawn from assumed facts, and of miscarriages arising from the want of correct information, similar to those now brought forward against vaccination, so that nearly fifty years elapsed before small pox inoculation was fully established.

18, That by a reference to the bills of mortality, it will appear that to the unfortunate neglect of vaccination, and to the prejudices raised against it, we may in a great measure, attribute the loss of nearly two thousand lives by the small pox, in this metropolis alone, within the present year.

19, That the few instances of failure either in the inoculation of the cow pox, or of the small pox, ought not to be considered as objections to either practice, but merely as deviations from the ordinary course of nature.

20, That from all the facts which they have been able to collect, it appears to the medical council, that the cow pox is generally mild and

harmless in its effects; and no instance has come to their knowledge, in which there was reason to admit, that vaccine inoculation had of itself, produced any new or dangerous disease, as has been ignorantly and unwarrantably asserted; but that the few cases which have been alleged against this opinion, may be fairly attributed to other causes.

21, That if a comparison be made between the effects of vaccination, and those of inoculation for the small pox, it would be necessary to take into account the greater number of persons who have been vaccinated within a given time, it being probable, that within the last seven years, nearly as many persons have been inoculated for the cow pox, as were ever inoculated for the small pox, since the practice was introduced into this kingdom.

22, That many well known cutaneous diseases, and some scrophulous complaints, have been represented as the effects of vaccine inoculation, when in fact they originated from other causes, and in many instances occurred long after vaccination, but that such diseases are infinitely less frequent after vaccination than after either the natural or inoculated small pox.

Having stated these facts, and made these observations, the medical council cannot conclude their report upon a subject so highly important and interesting to all classes of the community, without making this solemn declaration.

That in their opinion, founded on their own individual experience, and the information which they have been able to collect from that of others, mankind have already derived great and incalculable benefit from the discovery of vaccination: and that it is their full belief, that the sanguine expectations of advantage and security, which have been formed from the inoculation of the cow pox, will be ultimately and completely fulfilled.

To the Editor of the Belfast Magazine.

SIR,

A SHORT time ago as I was reading the seventh volume of the spectator, No. 515, I met with the following hymn, in French, said to have been written by a Monsieur des Barreaux, one of the greatest libertines of the age in which he lived; but who was afterwards as great a penitent. The praises there bestowed upon it raised in me a desire to see it in English; therefore as I have never met with it any where, in that language, I have sent a copy of it for insertion in your Magazine for this month, in hopes some of your classical correspondents will favour the public and me with a translation of it in a future number. Your giving it a place in some spare corner of your pages will oblige a Subscriber.

Ballinahinch, Nov. 1809. S.

Grand dieu, tes jugemens sont remplis
d'equité;
Toûjours tu prens plaisir à Nous être
propice.
Mais j' ai tant fait de mal, que jamais ta
bonte
Ne me pardonnera, sans choquer ta justice.
Oui, mon dieu, la grandeur de mon impieté,
Ne laisse à ton pouvoir que le choix du
supplice;
Ton interêt s'oppose à ma felicité;
Et ta clemence meme attend que je perisse.
Contente ton desir, puis qu'il t'est glorieux;
Offense toy des pleurs qui coulent de
mes yeux;
Tonne, frappe, il est tems, rends moi
guerre pour guerre;
J' adore en perissant la raison qui t' aigrit,
Mais dessus quel endroit tombera ton
tonnerre,
Qui ne soit tout couvert du sang de Jesus
Christ.

For the Belfast Monthly Magazine.

Account of the Management of Bees on Mount Hymettus, in Greece; by George Wheler, Esq.

"THE hives which they keep their bees in, are made of willows, or osiers, fashioned like our common dust baskets, wide at the top, and narrow at the bottom; and plaistered with clay, or loam, within and without. They are set the wide end upwards. The tops being covered with broad flat sticks, are also plaistered with clay at the top; and

to secure them from the weather, they cover them with a tuft of straw as we do. Along each of those sticks, the bees fasten their combs; so that a comb may be taken out whole, without the least bruising, and with the greatest ease imaginable. To increase them in spring time, that is in March or April, until the beginning of May, they divide them; first separating the sticks, on which the combs and bees are fastened, from one another with a knife; so taking out the first comb and bees together, on each side, they put them into another basket, in the same order as they were taken out, until they have equally divided them. After this, when they are both again accommodated with sticks and plaister, they set the new basket in the place of the old one, and the old one in some new place. And all this they do in the middle of the day, at such time as the greatest part of the bees are abroad; who at their coming home, without much difficulty, by this means divide themselves equally. This device hinders them from swarming, and flying away. In August they take out their honey; which they do in the day time also, while they are abroad; the bees being thereby, they say, disturbed least. At which time they take out the combs laden with honey, as before; that is beginning at each outside, and so taking away, until they have left only such a quantity of combs in the middle, as they judge will be sufficient to maintain the bees in winter; sweeping those bees that are on the combs they take out, into the basket again, and again covering it with new sticks and plaister. All that I doubt concerning the practice of this in England, is, that perhaps they may gather a less quantity of honey; and that should they take the like quantity of honey from the bees in England, they would not leave enough to preserve them in winter. But this hinders not much: for by being less covetous, and not taking so much honey from the poor bees, the great increase and multiplying of them would soon equalize, and far exceed the little profit we make by destroying of them. This is done without smoak; wherefore the ancients call this honey, unsmoaken honey: and I believe the smoak of sulphur, which we use, takes away very much of the fragrancy of the wax; and sure I am, the honey can receive neither good taste, nor good smell from it."

For the Belfast Monthly Magazine.

SAINCLAIR,

TRANSLATED FROM THE FRENCH OF MADAME DE GENLIS.

ALWAYS lectures, exclaimed young Sainclair with some asperity; always poetry and music; always learned dissertations, and never a moment of conversation. Yes, my dear Duval, my patience is exhausted; I can no longer support it! "What" replied Duval, "you, who have made such progress in your studies, and who have always shewn so much taste for the fine arts, how is it, that you know not how to appreciate the happiness of belonging to a family so distinguished by wit and talents?"

Well, my friend, the whole city of Toulouse cannot furnish another house, the interior of which is more mortally wearisome, than this. "How? You astonish me, you know, when we were at college, we had very different opinions on this; you incessantly observed, how fortunate it was for an orphan to have the Baron D'Elbach for an uncle and guardian."

I love and revere my uncle, and I would not speak of my little uneasinesses, but to the companion of my infancy and youth, and my best friend. Even during our long separation, I did not think myself at liberty to mention a word of them in any of my letters; so that what I tell you is rather a confession extorted by you, than a confidence voluntarily reposed in you. "But are you in love with your cousin? This match would be so suitable, and your uncle is desirous of it"—Most certainly, at bottom I have a liking for Clementina. "She is really charming"—Yes, for strangers. "How?"—My friend, she has a brilliant character to support in this city, she thinks of nothing, but how to exalt it: if you knew, how insupportable this ambition ren-

ders a female in the interior of a family! For example, she charms you in a concert, when she sings and plays on the piano; you then enjoy the fruit of the labour, and I have borne all the tiresomeness of the study. I have heard her, for whole days, decypher and scribble over, and repeat without end the air, which ravishes you. Besides, my friend, here no one *converses;* we study, we give dissertations, we recite.—"But Clementina's brother, your cousin Ovid is so good a lad."—Yes, thank heaven, he does not understand so much as the measure of a verse, notwithstanding the famous name, he received at his birth, but they have made a botanist of him; he is, besides, the most merciless player on the violin! and we lie in the same room.

Figure to yourself, how impossible it is for me to read or write a single hour uninterruptedly with this cursed violin in my ears. If in the forenoon I go down to the parlour, there I find Clementina at her harpsichord, and totally occupied with her music, or else she is shut up in her chamber, in order that she may compose the air and words of a musical piece without being disturbed: my aunt, on her side, makes translations of novels; my uncle, buried in his study, meditates profoundly on antiquity. In the mean time I wander sadly about the house. At last we assemble to dine; the guests, all wits, arrive: literature is the subject of conversation: no one thinks of any thing but of shining; in these conversations it is in vain to look for variety, natural ease, or gaiety.

I know, beforehand, every thing that will be said, all the compliments they will pay each other, all the strokes of satire that will be levelled at the authors, whose success they envy.

On leaving the table, Ovid and I generally disappear in order to take a walk. While I am striving to escape the bel Esprit, I am pursued by science. I cannot tell, whether it be true, as it is pretended, that Ovid is the greatest botanist in Languedoc, but I can assure you, that most assuredly he is the most impetuous. Nothing can stop him: he climbs to the tops of trees, to come at a moss which tempts him; he clambers up mountains; he precipitates himself into marshes; and he drags me with him every whither. Yesterday he was near drowning me in a pond. The matter in agitation was to achieve a water-lily of the commonest kind, but which at a distance he mistook for the lotus of the ancients. Out of breath, covered with mud, harassed, exhausted, I come home to assist at lectures!—Fragments translated from the English, by my aunt, learned digressions by my uncle, verses by my cousin. Ovid, in his quality of botanist, has the happy right of going to sleep with impunity; but from me they exact an incessant attention. I must conquer sleep, stifle my yawns, hide my ennui—I must listen! This is what my aunt calls our little family meetings.

"Your uncle is really a profound scholar, and one may at least learn something in listening to him." My uncle doubtless is a very learned and very laborious scholar: but would you believe, that after forty years study, he has not the most distant notion, that the useful application of knowledge is to go for any thing? Every labour, that is carried on through the medium of an acquaintance with the classical languages appears to him admirable. Every work is valuable in his eyes, when all its pages are crowded with quotations in Greek and Latin. What an eulogium are these words from my uncle: this man is well acquainted with antiquity; as much as to say, this man is full of wit, taste, genius—what would be thought of an architect, who, on a foundation of stone and marble, would erect an edifice and reeds?—Such is the majority of our learned men; such especially is my uncle. What writings has he published! Reflections on the Tau of the Ægyptians; the object is to know whether this tau is, or is not, a Key,—a discourse on *aorasy;* that is to say, the invisibility attributed in fable to the Gods of paganism. A dissertation on Nectar and Ambrosia. Another on the statue of the gladiator, which according to

him, is not a gladiator, &c. It would seem as if, having handled so many weighty subjects, he thought, he had exhausted the most important things antiquity can offer; for lately he has condescended to fix on the middle ages. He read to us lately two treatises, the one on uncoined* money, the other on the Reginæ pedauci. "Reginæ pedauci! and pray, what people have they reigned over?" Ignorant fellow—not to know, that they are gothic statues, which represent females, with one foot in the form of a goose's foot? "Pray, where are such to be seen?" At the portal of some of our old churches. Much has been written to explain this odd whim, and my uncle after many sleepless nights, and much research, has declared loudly for those, who recognise in this figure Queen St. Clotilda. "Does he believe then, that St. Clotilda had goose's feet." He sees nothing in these feet but symbols of vigilance. "Poor Sainclair! In truth, after this picture of the family, I can conceive, your days do not pass away in the most agreeable manner—what? never any pleasant little conversations, no effusions of the heart?" Oh, I cannot complain of their want of feeling—they speak to me very candidly: but they are solely occupied with the desire of making a name, and the most intimate confidence in this case can only reveal the hopes, fears, and illusions of self-love. Still Clementina has an inclination for you; that I am sure of." I believe so too: but I have a very formidable rival. "Who, pray?" Versillac.

"A ridiculous pedant: a young man the most completely devoid of any agreeable qualities, the most tiresome." Aye, but he has borne off a prize for poetry at the floral games.

It was not without reason Sainclair dreaded a rival, who had just obtained the golden violet, for so many ages an object of the most lively emulation to all the young poets of Tolouse. Clementina did, in reality, love Sainclair: however literary glory was in her eyes of such value, that she thought the sacrifice of her inclinations and engagements for it, but a reasonable and noble act. Sainclair was amiable and virtuous; but she discovered in him so many inexcusable defects! He listened so coldly to the most charming productions! He had so little susceptibility of enthusiasm for poetry! Besides, what could one expect from a young man of two and twenty, who, with understanding and information, had not yet published a single page; while Versillac of the same age, had already collected *his works*, gathering together his madrigals, fables, enigmas, charades, and epistles, which had been dispersed in a variety of journals, particularly in the Muses' Almanack.

In fine, it was but too presumable that Sainclair, through his carelessness and sloth, would never become celebrated; thus Clementina, authorized by her parents to chuse a husband, was at bottom decided in favour of Versillac, and her mother, who did not like Sainclair, strengthened her daily in this resolve.

Sainclair, however, in despight of his penetration and his fears, preserved more hope, than he had manifested to his friend. Baron D'Elbach, when he had formerly sanctioned the mutual inclination of his daughter and nephew, had really told them, that they were not to consider themselves as irrevocably engaged, because he wished them to have sufficient time for the most serious reflections on the subject; but Clementina had made an avowal of her partiality to Sainclair, and he was as yet unacquainted with all the power of self love; a thing in which experience alone, can instruct the modest and the feeling. Sainclair determined to conceal from Clementina his inquietude and jealousy, persuaded, that the best way was to show an unlimited confidence and a perfect security.

While matters were going on thus, Sainclair's friend received a letter from Paris, which caused him much embarrassment, and which he hastened to communicate to Sainclair. In it he was informed, that solicitations had been made to obtain for him an honourable and lucrative situation;

* *Money unstamped*, as in old times it was bartered by weight. Bractea is a thin plate of metal.

and it was added, that this favour depended on a person in power, who was passionately addicted to literature, and that therefore it would not be granted to any but to him, who should obtain the prize proposed by the academy.

"Well," said Sainclair, "It is the eulogy of a great man: you must do it." "Are you ridiculing me?" replied Duval. "By no means. "I make an academical eulogium!"—"Why not? many who have not half your talent, have succeeded in this way; would you desire to distinguish yourself in it?" "How?" "Be natural and rational; you will appear with the advantage of novelty." "Unfortunately I possess no species of merit but that necessary to fill the office applied for. I shall never obtain it, for I am sensible I should make but a bad oratorial discourse." "Try it at least." "Will you then act the critic, and tell me the truth?" "You may rely on me."

This assurance decided Duval, who applied himself to his task with ardour, and at the end of three weeks, brought his work to Sainclair, declaring at the same time, that he himself thought it detestable. He was right in his opinion, and Sainclair did not take any pains to convince him of the contrary; but drawing a small manuscript from his portfolio, "my friend," said he to him, "I have on my side laboured on the same subject, and will you hear me in your turn?" At these words, opening his manuscript, he commenced and read for about half an hour, to the exquisite delight of Duval.

"I imagine," said Sainclair, "you easily guess, I have composed this only in the hope of its being useful; give me my reward by putting your name to it." Duval exclaimed against this proposal with all the warmth a just delicacy can inspire. "This species of deception," replied Sainclair, would be no doubt most unworthy, if produced on the one side by a mercenary interestedness, and on the other by a puerile vanity. But all the gifts of friendship are honourable; vanity has nothing to do in this case; you have not the ambition of achieving the academic palm; you desire to obtain a place, which you could fill with honour, and which would put you in the rank of useful citizens. Do people ever scruple signing a memorial, when business requires it, because another has drawn up for them, what they had the capacity to do for themselves? The deception I propose is much more innocent, for you would not require the assistance of any one, if you were obliged to exhibit only the learning necessary for the proper discharge of the office, you are going to solicit. Whimsically enough no talents have been required in this case, but such as are entirely foreign from it. To satisfy this caprice then, is not deception, since you possess every reasonable requisite." "But how could I receive the praises, this work shall draw on me?" "Just in the same way, as all authors receive the compliments paid them, with embarrassment, and an endeavour to shorten them" "No, I cannot resolve to rob you of the fame, this work would give you." "My friend do not think that literary celebrity can be so easily acquired. To make a name, among so many estimable and brilliant ones, a first effort, however happy it may be, is not sufficient; one's life must be devoted to study; that is above my strength. My inclinations and character, render me absolutely incapable of it, so I shall never obtain a great reputation."

"But do you consider, that this single instance of success, would decide Clementina in your favour?"—"I never will marry a woman, who would give herself to me from vanity, if Clementina is capable of sacrificing one whom she has loved from her childhood, to her taste for fame, be assured, I shall not regret her."

Sainclair urged many more reasons, by which Duval was prevailed on to accept of the work, and to give it in as his own production. A few days after, Duval departed for Paris; he sent his historical eulogy to the academy, and received the prize with an unanimous voice. This success which made a great noise, made his fortune, he obtained the place, which his friends had so-

licited for him. Transported with joy, and with gratitude to his friend, he requested leave of absence for two months, in order to go to Thoulouse, and make him a sharer in his happiness. The day after his arrival at Thoulouse, the brother of Clementina told him in confidence, that his sister had entirely determined on marrying Versillac, and that she declared it continually. On hearing this, Duval thought it his duty to act unknown to his friend. A man who had just borne off the first prize, adjudged by the first academy in the kingdom, could not but be favourably heard. Clementina had conceived the highest esteem for him, she received him in her music room, and there Duval began by exacting a promise of inviolable secrecy with respect to what he was going to say, adding, that he was particularly anxious, Sainclair should never know the avowal he was going to make.

This commencement surprized and agitated Clementina, she imagined Duval was proceeding to make a declaration of love, and calculating with rapidity, that celebrity acquired at Paris, is infinitely more glorious than the most brilliant provincial reputation, she already meditated confusedly a rupture with Versillac; when Duval declared without hesitation, that Sainclair was the true author of the discourse which had been crowned at Paris. "Now," continued he, "would you prefer a pedant without genius, to a modest, generous man, who possesses such talent?" At these words, Clementina remaining silent, seemed to reflect, then speaking in her turn, "Yes," said she, with a sigh, "I am not at all surprized, that Sainclair could conquer his sloth for friendship, he would not do so much for glory!"

"Have you not been charmed with the discourse-though?" Oh! certainly; but no one will ever know who is the author of it."

These words discovered a depth of vanity that disgusted Duval, he got up, and taking an unceremonious leave of Clementina, he disappeared.

To be Continued.

To the Proprietors of the Belfast Magazine.

GENTLEMEN,

IT has fallen in my way to remark the gross errors and confusion of Goldsmith's history of Greece, which however is the only book of the kind, adapted for boys; and I have it in view to compile a history for the use of schools, that should avoid the errors, &c. observable in the above. Before I would go far in such a work, which to me would be laborious, I would be glad you would make public the intention, that we might try to learn how such a thing would be received. Any information, you could gain on the subject would be gladly applied for, by your friend and servant. X.Y.

To the Proprietors of the Belfast Magazine.

GENTLEMEN,

IN my observations on the nature of soils, &c. published in your September Magazine, there are some errors which I imagine must be in the press, as I think they are not in the manuscripts. I should not have troubled you *on this occasion*, only there is one in particular (which ought to be corrected in your errata) in page 180, column 1st. the 14th line from the top, for "eight" read *three*, and also the word "of" ought to be expunged in the 21st line of said column. There are other errors of minor importance particularly a misplaced stop at "silicious"; in the 7th line of said column, and the word "to" in the 2d column of said page, line 27th from the top ought to be *too*, but almost every person knows these last are typical errors. In the 44th line of the last mentioned column the word "trenches" has been substituted for the word French which is in the manuscript. French Sewers is the name universally adopted for closed sewers in this country, whether from their being first introduced from France into these kingdoms or not I cannot tell. Your's truly, J.D.

CHARTER OF BELFAST.

MAN on becoming a member of society was obliged to give up a

certain portion of his liberty of action in order to assimulate to the opinion of others, and enter into a compact of equality of rights. And in proportion as governments tend to preserve the individual right of action, they have always been reckoned free or despotic. The British government in this respect, has long been the admiration of mankind, as interfering, least of all others with the natural rights of the individual, and while the liberties of the people were trampled upon in all the surrounding nations, and the tyrannic sway of the feudal system extended its baneful influence over a depressed and degraded people, this government, by means of its republican preponderance, and granting of powers to lesser bodies, for their internal government in the form of charters of incorporation, extended a beautiful and beneficial system of fæderalism over the whole empire. By means of these charters, certain guardians of the public were impowered to levy sums of money, in order to provide and maintain market places, and other conveniences for the comfort and accomodation of the inhabitants, to whom they were obliged to give a faithful account of the execution of their trust; but by inattention on the part of the inhabitants, active individuals have from time to time made inroads on the rights of the people, and the original intention of the grant has in many instances been completely destroyed, and instead of the sums levied being laid out for the benefit of the community, they are now monopolized, sold to the highest bidder, and the public no longer accommodated. Having been favoured with a translation from the original Latin, of the charter of Belfast, granted in the early part of the reign of James the first, and thinking it may be an object of curiosity to many of our readers, we take the earliest opportunity of publishing it, with a list of the sovereigns and burgesses to the year 1761, and intend as often as we can meet with charters and acts of parliament which concern the public at large, to present them to our readers.

B.M.

JAMES, by the grace of God, of England, Scotland, France and Ireland King, Defender of the Faith, and so forth. To all to whom these our present letters shall come greeting; know ye, that we as well on the humble petition of the inhabitants of the town of Belfast in our county of Antrim, in our province of Ulster, in our kingdom of Ireland, as for the inhabiting and planting of the Northern parts of our said kingdom, now depopulated and laid waste, according to the republic form in our kingdom of England, excellently began and for the better progress in and perfection of our new plantations, lately happily undertaken of our special grace, and of our certain knowledge, and mere motion by and with the assent of our well beloved, and faithful counsellor, Arthur Lord Chichester of Belfast, our deputy general of our said kingdom of Ireland; and also according to the tenor and effect of our certain letters signed with our proper hand and under our seal, bearing date at our Manor of Farnham, the last day of July, in the year of our reign of England, France and Ireland the 5th, and of Scotland the 42d, and now enrolled in the rolls of our high court of chancery, in our said kingdom of Ireland. We do appoint, ordain and declare, by these presents that the aforesaid town of Belfast, and all and singular castles, messuages, tofts, mills, houses, edifices, structures, curtillages, gardens, orchards wastes, waters, rivers, lands, tenements and hereditaments whatsoever, with their appurtenances lying, or being in or within the said town, or village, or precincts of the said, the castle of Belfast, and all curtillages, gardens, orchards, fruitery's and edifices whatsoever to the said castle now belonging, only excepted, from henceforth shall be for ever one whole and free borough of itself by the name of the borough of Belfast, and the borough of Belfast from henceforth shall be called, named, and known, and in all things into one whole and free borough in itself, by the name of the borough of Belfast, we do erect, constitute, make and ordain by these presents. And further we will ordain and appoint, by these

presents, that the borough aforesaid, may be one body corporate and politic, consisting of one sovereign, 12 free burgesses, *and commonalty, and that all the inhabitants within the town and lands aforesaid*, from henceforth for ever, may, and shall be by virtue of these presents, one body corporate and politic, in word deed and name, by the name of sovereign, free burgesses and commonalty of the borough of Belfast, and they by the name of sovereign, free burgesses and commonalty of the borough of Belfast aforesaid, into one body corporate and politic, in word, deed and name, we do really, and fully, for us our heirs and successors, erect, make, ordain, and appoint, by these presents, and that by the same name, they may have succession, and that they by the name of sovereign, free burgesses and commonalty of the borough of Belfast, may, and shall be in future, persons fit and capable in law, to hold, perceive, receive, and possess lands, messuages, tenements, liberties, privileges, jurisdictions, franchises, and hereditaments whatsoever, of what kind, nature or species they be, to them and their successors, in fee and perpetuity, and also goods and chattles and whatever other things of any kind, nature or species they may be, and also to give, grant, convey and assign, lands, tenements and hereditaments, goods and chattles, and to do and cause to be done, and executed, all and singular, every other thing by the name aforesaid, and that by the name of sovereign free burgesses and commonalty of the borough of Belfast, they may be able to plead, and be pleaded unto to answer and be answered, defend and be defended, before us our heirs and successors, and before every other, the justices and judges of us our heirs and successors, and all others whatsoever, in all the courts of us our heirs and successors, and elsewhere wheresoever of, and in all, and all kinds of actions, suits, pleas, complaints and demands whatsoever, by them and every of them in any manner, to be prosecuted or carried on, and that they the aforesaid, sovereign and free burgesses of the borough of Belfast aforesaid, and their successors for ever, may have full power and authority to elect, send and return two discreet and proper men to serve and attend in every the parliaments hereafter to be held in our said kingdom of Ireland, and which said men so elected and chosen, and returned, may have full power and authority to treat and consider of the above mentioned things and matters, which to them and others are expounded and declared and thereupon, moreover to return and render their free voice and suffrages, and to do and execute all other matters and things whatsoever, as fully and freely, and as any other burgesses of any ancient borough in our said kingdom of Ireland, or in our said kingdom of England, in the parliaments of the same are accustomed to do and execute; wherefore we will, and by these presents for us our heirs and successors, do grant to the aforesaid sovereign and free burgesses of the borough aforesaid, and their successors and also we command, order, and for us our heirs and successors we do direct all sheriffs, officers and ministers of us our heirs and successors whatsoever, in our said county of Antrim for the time being to receive any writ or writs to them directed, for the election of burgesses in parliament, at any time within our said county of Antrim, and that every such sheriffs, officers or ministers, to whom such writ or writs are so as aforesaid directed, do make a precept and summons to the sovereign and free burgesses of the said borough of Belfast, for the time being, for the election and returning of the said two burgesses, according to the form and effect of the said writ or writs and these our letters patent, or the inrollment thereof, shall be as well to the said sovereign and free burgesses of the borough aforesaid, and their successors, as to all and singular the sheriffs, officers and ministers of us, our heirs and successors whatsoever, a sufficient warrant and discharge on that behalf, and that the same may appear hereafter, that this our new and already incorporated body is composed of just and honest men, we do make, constitute and appoint

John Vesey to be our first and modern sovereign, of our said borough, to continue in the said office until the feast of St Michael the arch angel, next after the date of these presents. And in the like manner we do make, constitute and appoint, Fulton Conway knight, Thomas Hibbotts, esq. Moses Hill, esq. Humphry Norton, esq. William Lewsley, John Willoughby, Carew Harte, John Ash, Daniel Boothe, James Burr, Walter Crimble, and John Barr, to be the first and modern 12 burgesses of the borough aforesaid, to continue in the said office of free burgesses of the said borough during their several and respective lives, unless for their bad behaviour, or any other reasonable cause he or they shall be removed from the office aforesaid, and all the inhabitants of the town aforesaid, and all and every other men whom the sovereign and free burgesses of the said borough, for the time being, into the liberties of the said borough shall admit, we will constitute and appoint to be the commonalty of the borough aforesaid; and further it is our will that the aforesaid John Vesey, whom by these presents we have made sovereign of the borough aforesaid, shall come before the 18th day of May next, following the date of these presents, before Fulton Conway, knight, our governor of our town of Carrick Fergus, and in due form shall take as well the oath commonly called the oath of supremacy, as well as his corporal oath, to well and truly execute the office of sovereign, of the borough aforesaid, until the feast of St. Michael the arch angel, next following, as is aforesaid, and that the sovereign of the said borough being so as aforesaid elected, we do therefore will and by these presents for us our heirs and successors grant to the aforegoing sovereign, free burgesses and commonalty of the borough aforesaid, and their successors, that the aforesaid sovereign and free burgesses of the borough aforesaid for the time being, for ever annually on the feast of the nativity of St. John the baptist, if it does not happen to be the Lord's day, and if the aforesaid feast shall happen to be the Lord's day, then on the day following the said feast shall and may have power and authority to assemble themselves in any convenient place within the said borough, and the said sovereign and free burgesses being so assembled, we will and grant that the aforesaid Arthur Lord Chichester of Belfast, his heirs and assigns, being lords and proprietors of the said castle of Belfast, he and they may have power to nominate 3 discreet and sufficient men, being free burgesses of the borough aforesaid, and he and they being so nominated and appointed, and presented to the aforesaid sovereign and free burgesses of the borough aforesaid, from among whom the aforesaid sovereign and free burgesses being so assembled or the major part of them before they depart therefrom, may have power then and there to chuse one, and whom they shall judge most fit to the office of sovereign of said borough to continue for one year from the feast of St. Michael the arch angel, then next following, and until one other of the burgesses of the said borough to the said office have been duly elected, chosen and sworn, and for want of such nomination by the aforesaid Lord Chichester, his heirs and assigns to be made in due form as aforesaid, we will, and do grant that the said sovereign and free burgesses of the said borough, then and there may have full power to chuse one of the most discreet free burgesses of the said borough, to the office of sovereign for one year next following as aforesaid, and every such sovereign being so chosen before he shall be admitted to execute the office aforesaid of sovereign, shall take as well the oath commonly called the oath of supremacy, as his corporal oath, to well and faithfully execute the office of sovereign of the aforesaid borough, from the feast of St. Michael, the archangel, then next following such election before the aforesaid Arthur Lord Chichester of Belfast, his heirs or assigns at his castle of Belfast, or in his or their absence before the constable of the said castle of Belfast, for the time being, and we do grant full power and authority to the aforesaid Arthur Lord Chichester of Belfast, his heirs and assigns aforesaid, and his and their constable of the said castle of Belfast, for the time being, to administer such oaths as aforesaid,

to every such sovereign so newly chosen; and moreover of our special grace, and of our certain knowledge, and mere motion we will and by these presents for us our heirs and successors, we do grant to the aforesaid sovereign, free burgesses and commonalty of the said borough, and their successors, that if, and as often as it shall happen, that such sovereign of the borough, aforesaid, for the time being, shall happen to die or be removed from such office aforesaid, within the year after he is so elected and chosen sovereign, as aforesaid, then and as often as it shall so happen, it shall be lawful for the said Arthur Lord Chichester of Belfast, his heirs or assigns aforesaid, to nominate three other discreet and sufficient men of the said borough, being free burgesses of the borough aforesaid, and his and their names being presented to the said free burgesses of the borough aforesaid, for the time being, out of which said free burgesses, they may have power and authorityto elect and chuse one fit person to be sovereign of the said borough, for the remainder of that year, within ten days after such vacancy; and for want of such nomination or presentation by the aforesaid Lord Chichester of Belfast, his heirs or assigns to be made in manner and form aforesaid, we will and grant that the said sovereign and free burgesses of the said borough, then and there may chuse one out of the said discreet free burgesses, to execute the office of sovereign for the remainder of that year as aforesaid, and that every such person and persons into the office of sovereign of the borough aforesaid, being so elected and chosen, may have power and authority to execute that office until the feast of St. Michael the arch angel, next following after such election, and taking the oath commonly called the oath of supremacy, and also the oath for the due execution of sovereign of the borough aforesaid, so as beforementioned.

And further of our Special Grace, and of our certain knowledge, and mere motion, we will by these presents, and for us our heirs and successors, do grant to the said Sovereign, free burgesses, and commonalty of the borough aforesaid, and their successors, that if any or either of such free burgessess so lately elected, shall or may happen to die, or he or they may be removed from that office, or which said free burgess, or any or either of them shall or may be removed for not behaving well in that office, our will and pleasure is, that the sovereign and the major part of the free burgesses of the said borough for the time being; that then the said sovereign, and the rest of the free burgesses of the borough aforesaid, for the time being within seven days, next after the death or removal of such free burgess, may have power and authority to assemble themselves together in any convenient place within the said borough, and the said sovereign and free burgesses being so assembled, or the greater part of them, before they depart, shall elect one or more of the best and most honest of the inhabitants of the borough aforesaid, into the place or places of such burgess or burgesses, so dying, or being removed from his or their said office or offices, to continue in the same office during their natural life, unless in the mean time for the bad government of them or for other bad behaviour, in that behalf he or they shall or may be removed from such office; and that every such person and persons, being so elected into the office of a burgess of said borough, before he is admitted to execute the said office, shall take his corporal oath, for his due and faithfully executing the said office within seven days next after such his election, before the sovereign of the borough aforesaid, for the time being, or before some other burgess of the said borough, then being, and remaining in that office, or the major part of them, which said sovereign for the time being, or such burgesses, for the time being, or the major part of them, shall have full power and authority to administer such oath to every such new burgess, being so chosen as aforesaid;—and we do hereby give and grant such power as often as such case shall require.

And further, of our special grace, and of our certain knowledge, and mere motion, we will, and by these

presents we do grant that as well, the lord of the said Castle of Belfast, and his heirs, as well as the constable of the said castle, for the time being, he and they, and every of them, may and shall be free burgesses of the said borough of Belfast, and that he and they, shall and may enjoy all, every, and as many liberties, privileges, and immunities, such, the like, and as many as any other, or others of the said burgesses of the borough of Belfast, by virtue of these our letters patent, have or hath power to have, use, or enjoy.

And further, of our more abundant special grace, and of our certain knowledge and mere motion, We will, and by these presents, for us, our heirs and successors, We do give and grant to the said sovereign, free burgesses, and commonalty of the said borough and their successors from time to time, and as often as it shall seem to them best, and most expedient, shall and may have power, and authority to assemble themselves, and meet together in any convenient place within the said borough, and then and there, with the advice and consent of the aforesaid Lord Chichester of Belfast, his heirs, and assigns, aforesaid, being Lords of the said Castle of Belfast, to make statutes, ordinances, and such the like, and as many acts, ordinances and by-laws, for the good ruling and sound governing of the said borough, and the inhabitants thereof as to them or the major part of them, shall seem necessary, and that they may have power and authority by fines and impositions of money, to chastise and correct whatever persons become delinquents against such acts ordinances and statutes; and the same fines, amerciaments, impositions and penalties of money, shall and may have power and authority, to levy and take to the use and behoof of the said sovereign, free burgesses and commonalty of the borough aforesaid, and their successors, without any impeachment of us, our heirs and successors, and without any composition, or any other matter to be rendered or made to us, our heirs or successors, from thence, and all and singular such laws, acts, statutes and ordinances, so as aforesaid, to be made, We will, shall be observed under the penalties contained in the same; provided always that the said laws, statutes and ordinances are not contrary or repugnant to the laws and statutes of our said kingdom of Ireland.

And moreover, of our special grace, and of our certain knowledge, and mere motion, We will, and by these presents for us, our heirs and successors, We do grant to the said sovereign, free burgesses and commonalty of the said borough, and their successors, that none of the inhabitants of the borough aforesaid, may or shall be impeached out of said borough, of or for any lands, tenements, rents or other hereditaments within the said borough, or within the metes, franchises, liberties, limits or precincts of the same, or of or for any trespasses, detentions, covenants, debts, demands, accounts, contracts, or any other causes, demands or controversies whatsoever, within the said borough, or within the franchises liberties or metes thereof, made or to be made, arising, or to arise, without the special licence of the said Arthur Lord Chichester of Belfast, their heirs and assigns, being Lords of the Castle of Belfast aforesaid. Or as touching and concerning the interest of us, our heirs or successors, or the interest of the said sovereign and free burgesses, or their successors in their right or political capacity, or touching the said sovereign in his own proper right.

And moreover, of our more abundant special grace, and of our certain knowledge, and mere motion, We will, and by these presents, for us. our heirs and successors, We do grant to the aforesaid free burgesses and commonalty of the borough aforesaid, and their successors for ever, to have and hold, and have power and authority, to have and hold, one court in any convenient and open place within the borough aforesaid, to be held before the sovereign of the said borough for the time being, and in the same court, to hold pleas every thursday from three weeks, to three weeks, of all, and singular covenants, debts, trespasses, detentions, contracts and personal demands whatsoever not exceeding the sum of £20

current money of Ireland, happening or arising in or within the aforesaid borough of Belfast, or the liberties thereof;—which said court shall be, and reputed, and deemed to be a Court of Record for ever.

And further, we will, and by these presents firmly enjoin and command that no person or persons from henceforth shall or may, sell or expose to sale, or cause to be sold or exposed to sale, by retail or otherwise any merchandize or commodities whatsoever by way of merchandize, within the space of three miles in a direct line to be measured, from every side of the said borough of Belfast unless such person or persons, is or are allowed and tolerated by the said Arthur Lord Chichester, his heirs and assigns being Lords of the Castle of Belfast, or the liberties thereof, or being cormorant and resident inhabitant or inhabitants thereof under the penalty of forfeiting all and singular such merchandize and commodities so against the true intent and meaning of these our Letters Patent, sold or exposed to sale.

And further of our more abundant special grace, certain knowledge and mere motion, we will and by these presents for us, our heirs and successors; do grant to the said sovereign, free burgesses, and commonalty of the borough aforesaid, and their successors for ever; that the sovereign of the borough aforesaid. for the time being, and his successors, when and as often as he shall receive and take his oath of office for the due and faithful executing of the said office of sovereign, in form aforesaid as above, by these presents specified, shall be a justice and keeper of the peace, of us, our heirs and successors, in and within the said borough of Belfast, and in and within all and singular the liberties, metes and bounds of the same; and that such justice and keeper of the peace, of us, our heirs and successors shall have power and authority, to keep and preserve the same: and also to enquire, hear and determine all things concerning our peace, in and within the borough aforesaid, or the liberties of the same.

And our further will is, and by these presents, for us our heirs and successors, We do grant to the said sovereign, free burgesses and commonalty of the said borough, and their successors for ever, that they may have a guild of merchants, within the said borough, and one common seal of such form, and engraved with such insignature as to them shall seem most fit and proper for the business and service of the said borough for ever; and that they may have power and authority for ever from time to time, as often as shall be needful to chuse and constitute from among themselves two serjeants at mace, and other inferior officers and servants necessary for the better governing of the borough aforesaid, and the inhabitants thereof, and every such person and persons so from time to time to be elected, constituted and appointed, We do constitute and ordain to be serjeants at mace and other inferior officers and servants of the said borough respectively and to continue in the said office during their good behaviour, or at the good will and pleasure of the said sovereign, free burgesses and commonalty of the borough aforesaid, and that every such serjeants, officers and servants before they are admitted to execute their said office, shall take before the sovereign of the said borough for the time being, his corporal oath, for the due and faithful execution of his said office.

We do grant, moreover, that the sovereign of the borough aforesaid, for the time being, shall be for ever clerk of the market within the borough aforesaid, and the liberties thereof, and from time to time may have full power and authority, to do and execute all and singular, such thing and things, to the said office of clerk of the market, within the borough aforesaid, belonging or appertaining; so that nevertheless no other clerk of the market of us, our heirs, or successors of the borough aforesaid, or the franchises of the same, may enter upon, or do any thing to the said office of clerk of the market, belonging or appertaining to be done, or executed; nor to any the office of clerk of the market, within the said borough, or the liberties thereof in any manner arising or happening may intrude himself.

And we will further of our special grace, and of our certain knowledge and mere motion, do grant to the said sovereign, free burgesses and commonalty of the borough of Belfast, that from henceforth it shall and may be lawful for all and singular, the said freemen of the borough aforesaid, and their successors to erect and appoint in the franchises of the said borough, one wharf or quay, in any convenient place, on the side of the river of Belfast aforesaid: and also that it shall and may be lawful for all and singular merchants, as well inhabitants as foreigners, and all other, our liege subjects whatsoever with ships and boats to come up and apply to said wharf or quay, and there to discharge and unload, and from thence also to export and convey away, all and all kinds of merchandize or other things, without the hinderance of us, our heirs or successors, or of any of the officers of our customs or searchers, or any or either of our officers of us, our heirs or successors being resident in our port of C. Fergus; provided always that the said merchants and other our liege subjects, pay or cause to be payed to us, our heirs and successors, all and singular our customs as well great as small, and subsidies of poundage and other impositions due and payable in our said port of C. Fergus, and in the bays and creeks of the same, for all and singular merchandizes imported and exported as aforesaid.

And further, of our more abundant special grace, and of our certain knowledge and mere motion, we do grant to the said sovereign, free busgesses and commonalty of the borough aforesaid, and their successors for ever, that these our letters patent, and every article and clause therein contained, or the inrollment thereof, shall be construed, interpreted, and adjudged for the greatest advantage, benefit, and favour of the aforesaid sovereign, free burgesses and commonalty of the borough aforesaid, and their successors towards and against us, our heirs, and successors, as well in all our courts, as else where within our said kingdom of Ireland, as elsewhere wheresoever, without any confirmation, licence, or toleration hereafter to be procured or obtained, notwithstanding that our writ of *ad quod dammum* did not issue to enquire of the premises, before the perfection of these our Letters Patent, and notwithstanding any defect or other matter, cause, or thing to the contrary, notwithstanding so that, &c. We will also, &c. and without any fine to be paid unto our Hanaper, &c.

In Witness whereof we have caused these our letters to be made patent; witness our aforesaid Deputy General, of our said kingdom of Ireland, at Dublin, the 27th day of April, in the year of our Reign of England, France and Ireland the 11th, and of Scotland the 46th.

By vertue of the King's Letter sent from England under his proper hand and seal.

A list of the Sovereigns and Burgesses of Belfast, from the date of this Charter till the year 1761, *will be given in our next.*

For the Belfast Monthly Magazine.

ON PUBLIC BAKERIES,

I HAVE lately seen in the Newspapers some remarks on a Public Bakery, and in the same paper sections from an act of parliament relative to the baking trade. This circumstance revived ideas, which I have often formerly had on these subjects, and which I am inclined to submit to the public through this miscellany.

One clause of the act requires the baker to take an oath of office, among other things to use only the prescribed materials in his bread. At one period of Irish legislation an oath was required almost on every occasion. Bakers, Brewers, Linendrapers must swear. The latter, indeed by a resolute stand at Armagh, in 1782, resisted, and refused to entangle themselves with an ensnaring and ignominious oath of office. They said, "let our properties be answerable for any mistakes we may happen to commit, but let us keep our consciences free." Those in other trades having less powers of resistance were forced to comply. It has always appeared to me a bad system of legislation to recur to perplexing oaths of office,

by which an honest man may be hampered in the proper exercise of his business, while the knave evades or boldly breaks through the net, with which it is proposed to secure him. I sincerely hope no efforts will be made to revive this oath of office, which very properly has almost become obsolete, though the enaction of the law is of recent date, I believe it is not passed above twenty years ago.

Public bakeries judiciously and conscientiously managed so as to hold an even balance between the interests of the public, and the fair profits of the trader, afford an excellent substitute for legislative or magisterial interference. Thus administered, they act on the fair principle of commercial rivalship. That they may not bear too hard on the private baker, or encroach on his reasonable profits, for all trades should be allowed to live, the subscribers should have a moderate profit on their deposites. If a public institution of this sort make a moderate dividend the private tradesman must be still better circumstanced as he has many advantages in the economy of management over a public institution; and to the enjoyment of these advantages the private baker is justly entitled. No attempts should be made to run him down, for this might lead to a most injurious and unjust monopoly on the part of the subscribers to a public bakery.

The leading aim of the managers of such an institution should be scrupulously to adjust the interests of the consumers and the bakers of bread, to prevent the former from being imposed upon by too small a loaf, or to bear too hard on the latter, so as not to allow him a full recompense for his toil and risque.

If public bakeries were generally established, and these principles strictly adhered to by an efficient committee of active and impartial men, the assize of bread would be better regulated than by oaths, or the remitting activity of public officers. The equitable principle of commerce, by customers going to the shop whether public or private at which they are best served, answers every purpose, as the bublic bakery always keeps up a fair competition, while care is taken that the trade should not degenerate into a monopoly on either sides. I see only one objection to public bakeries, the difficulty of getting a suitable committee who will attend to their functions in the present lack of public spirit.

K.

For the Belfast Monthly Magazine.

ON SOME FASHIONABLE ERRORS IN SOCIAL INTERCOURSE.

IT has been asserted that some foreign nations have no term in their language equivalent to our word, comfort. Probably national partiality has issued this assertion, which like many other vague and confident maxims has been implicitly adopted without examination, through the prejudice of national vanity. Be this, however, as it may, I am confident, that there is no such word, as comfort in the vocabulary of the votaries of fashion, who have no other standard of convenience than the prevailing mode of the day, but who with wonderful facility discover that those things which were convenient, and had innumerable advantages yesterday, have lost to day all these advantages not from any alteration intrinsically in the things themselves, but because fashion in the omnipotence of her sway, has changed her unstable and fluctuating decrees. But it is not my intention at present to attack the voluminous and unsettled code of fashion, at full length or in bulk, such an attempt would bewilder myself and my readers: I shall select only one of her laws, and endeavour to show how far the unaffected hospitality of former times has been ill exchanged for the ostentatious entertainments of the present day.

In good old fashioned times, a friend was received without ceremony, and invited to partake of the fare that was going, so as to suit his convenience, and a hearty welcome supplied the place of ostentation. If a friend from a distance called in, he was heartily welcomed and his accommodation, not the vanity of the entertainer to display the parade of a costly entertainment set out

with all the accompaniments of frippery and show was made the measure of this real hospitality. One neighbour visited another in a free and easy manner, without the formality and intolerable fatiguing burden of a long preparation. Now it is the fashion to give *feasts*. "The peasant's toe treads on the courtier's heel," and the formerly plain character of the merchant and his family is changed into the stately manners of the ancient aristocracy. Invitations are issued many days beforehand; immense preparations are made, to which if the mistress of the house is an economist, and minds household affairs, she becomes a slave, and a week of anxiety, *that all may go off well* is repaid by a few hours of a hurried and unsocial croud. I suppose I ought to apologize for the unfashionable vulgarity of my notions in allotting such employment for the Madame, for in the point of good housewifery also I fear fashion has extended its baneful influence. The day comes, at a late hour the company assemble in a crowded room, sociability, or the free converse of congenial minds is banished, and reserve and constraint, the necessary attendants of large companies are substituted. A few general common place subjects of conversation are touched upon, each attempts some kind of vague interchange of words with his neighbour, and the dinner proceeds in all the established routine of fashionable dullness. Sometimes there is a different but not better state. Maria Edgeworth in her excellent tale of Manœuvring, informs us that "at such dinners is the best time in the world for telling secrets to next neighbours, for every body is talking at once, and eating, and drinking, and carving. You may say what you please, your neighbours are all happily engaged, too busy to mind you.—The most perfect solitude is not so convenient as one of those great dinners" But general interesting conversation is banished from such societies where all are totally absorbed in their insulated enjoyments. This is a severe but just sarcasm on modern fashionable parties. Cowper with his delicate pen sums up the close of such mixed and fatiguing assemblages,

"The visit paid, with extacy we come,
As from a seven years' transportation home,
And there resume an unembarass'd brow,
Recovering what we lost, we know not how,
The faculties that seem'd reduced to nought,
Expression and the privilege of thought."

We frequently hear the quotation of "the feast of reason and the flow of soul," miserably misapplied on such occasions. In some instances, and to describe occurrences of this kind, there is a *cant* of expression ready to be applied on all occasions. Expressions without a precise appropriate meaning, may be denominated cant.

The remarks on great dinners are equally applicable to large evening parties. The richer inhabitants of Belfast and our country towns imitate at unequal distance, the manners of the larger cities—for here also,

———"Our drawing rooms begin to blaze,
With lights, by clear reflection multiplied,
From many a mirror."———

The infection spreads: those who are less able to afford the expense, follow the example, and the influence of fashion descends through two or three lower links of the chain. Through all classes comforts and real satisfactions are diminishing and show, and a state, in many instances, approaching to *splendid misery* usurp their place. Dr. Franklin judiciously remarks that notwithstanding our complaints of bad times, our heaviest tax is imposed by our vanity.

Without unduly lavishing praises on past times, it may be allowed to wish for a return to greater simplicity of manners, less shew and more substantial comforts. Real enjoyments would be increased by a salutary reduction of luxurious habits. Sentiments of virtuous independence would also be thus strengthened, for the air of a drawing room, as well as "the gilt buffet's reflected pride," have an injurious effect, indispose the mind to reflection,

"And turns from sound philosophy aside."

We require reforms in our social manners, and it would be of unspeakable advantage to the cause of public reform, if it were thoroughly bottomed on the basis of private and

individual reform. The abrogation of luxury would confer two most essential benefits, the promotion of domestic happiness and the increase of public and private virtue. It would be well to resist the sway of fashion, and submit only to the rule of reason not to live as others live, but according to a well digested plan suited to our particular circumstances, to enjoy as many of the comforts, and as few of the inconveniences of life, as may be consistent with our lot—at least let us not multiply evils by an unwise choice, and a foolish imitation of fashionable life, but wisely prefer reality to tinsel and comfort to show.

K.

For the Belfast Monthly Magazine.

DESCRIPTION OF THE SHIP ECONOMY, 200 TONS MEASUREMENT, BUILT ACCORDING TO J. W. BOSWELL'S PATENT.

THE plan adopted in the formation of this ship is that designed for large ships of 500 tons and upwards, and the third mentioned in the specification.*

Its external appearance is not different from that of another vessel of the size, and the outward planking is done in the usual manner. It is the internal construction alone to which the patent relates, and that is as follows:

The best general idea of it will be obtained by conceiving a vessel built with timbers, or ribs, much smaller than usual, with an internal framing, so contrived as to give every requisite support and strength both to them and the entire vessel, with the least timber and of the cheapest form, and without any knee timber.

The floor-timbers are molded seven inches, and sided six: these, with four futtocks and two top timbers at each side, form what is called a frame of timbers. Those small timbers are laid down so that their terminations all fall out in fair lines, which (below the wales) are nearly the same as the ribband lines. Along those lines inside are laid fore and aft ribs, from stem to stern post, so as to support the extremity of every one of the small ribs in the ship. The fore and aft ribs are six in number at each side; one directly under the water ways, another at the level of the lower beams, and the other four are placed nearly at equal distances between these last and the kelson;—each pair uniting in a breast-hook at the stem.

The pieces of timber which form these fore and aft ribs are scarfed at their extremities with hook scarfs, and so placed that the scarfs fall out in fair vertical sections of the ship, where they are supported, and firmly bolted to transverse framings, contrived so as to unite the greatest strength with the least obstruction, and which are five in number in the whole ship.

Those transverse framings are each formed by one upper and one lower beam, two pair of futtocks, a floor timber, two pair of top timbers and four bracing pieces; the whole connected into one firm framing, self-supported, independent of any other part.

The four bracing pieces form each framing into a set of triangular compartments: which triangular framing gives the greatest stability possible, as a triangular frame cannot be made to give in, or alter its figure, by any force which is not sufficient to tear its connecting parts through the timber of which it is composed; a property which no other figure possesses.

These tranverse framings (besides supporting the fore and aft ribs, and by them the small vertical timbers) tie and unite the vessel together across ship, so as to give much greater strength than hanging knees, whose place they supply, at a much cheaper rate.

The framing of the deck is also divided into triangular compartments, so as to preclude the use of lodging knees entirely; which compartments are formed by six pieces of timber, which proceed obliquely at each side, from the top of each beam to the fore and aft rib next adjoining, into which they are dove-tailed and bolted; long carlings from beam to beam at each side of the hatchways, wi-

* See vol. II. Second Series, p. 81 of Repertory of Arts.

these pieces, support small ledges, on which the deck is laid in the usual manner.

Advantages of this method of framing Ships.

1. Timber of less than one fourth of the usual girth can be used, in this method, in constructing large vessels, for nearly four-fifths of their frames.

This will be a direct saving in the difference of price of small timber and large for the quantity used; for large vessels this will be considerable, and according to the present contract prizes for naval timber, not less than from two to four pounds per load. Besides this, it is a great national benefit in another point; for by this means, timber of half the number of years growth, or less, can be used for naval purposes; and thus forty or fifty years, or even less, be sufficient to produce timber fit for the navy, instead of the vast period of near a century. now necessary; by which the land will not only produce a double crop in the same time, fit for this purpose, but all danger be removed of there being a stoppage of building, for want of a supply of timber, at any future period; an event extremely probable to take place, from the increasing difficulty of getting the large kind used at present in the Royal dock yards.

2. Much shorter timber may, in forming the futooks be used, without any danger of weakening the ship, on account of the great support given to them by the fore and aft ribs, and other internal framing, before described.

The advantage of this is, that it renders the compass timber for futtocks easier to be procured, and prevents any necessity of using any timber cut across the grain.

3. The use of knees of every kind is superseded by this mode of building, as the triangular framing of the decks gives all the effect of lodging-knees, and that of the transverse frames more than suplies the support given by hanging knees.

This would occasion a considerable saving in large vessels, on account of the great price of knee-timber fit for them; which for that of 30 feet meeting, was when the ship was building near ten pound per load, and for the smallest kind taken at the Portsmouth royal dock yard, not less than £8 15s. and is now much dearer.

4. Plank of half the usual thickness may be used for lining; the great support given by the fore and aft ribs rendering any use of inside plank, to strengthen the vessel needless, and confining its purpose merely to prevent ballast, or other matters, from getting between the timbers, so as to rest on the outside plank.

This will also cause a saving of consequence in large vessels; plank of all kinds, but particularly that of great thickness, being the next dearest article to knee timber.

5. It is probable a much less quantity of timber might be used with safety in this method, on account of the great strength produced for the timber used. 1st. By the triangular framing. 2dly. By every timber having a solid support at each extremity.—3dly. By the increase of thickness from in to out, all along the fore and aft ribs being very great in proportion to the timber used.

6. It is probable, vessels built in this method will last many years longer before decay; because the use of small timber admits of a kind more spiny and durable than the large, which is often dotard, and never lasts so long; and also because this construction admits of a free circulation of air among the timbers, than which nothing is known to contribute so much to their preservation. It is moreover conceived, that the timbers being prevented from working, by the solid support each has at its extremities, will cause the vessel to wear less, and at the same time render it safer, by diminishing the danger of starting planks, or otherwise causing bad leaks.

7. The timber of considerable size used in this method is almost all nearly straight, or of very little curvature, on account of its running fore and aft.

This kind is much easier to procure than large compass timber.

8. Short-top timber and coarse butts can be worked up to advantage, instead of being sold for less than half

cost, or burned; as this kind will do sufficiently well for the number of short ledges in the deck frames, and to support the lining at the floor, which are wanted in this mode of building.

9. Vessels built in this manner will not be so liable as others to hog, or have their backs broken, on account of the great strength length-ways, caused by the fore and aft ribs.

10. Vessels so built will be drier, from the circulation of air before mentioned, and having the floor lining detached from the timbers; which quality renders this construction particularly valuable for the ships used in the East and West India trade.

The advantages above recited relate to vessels entirely formed in this manner. It should be known also, that part of this plan may be applied with profit. The mode of framing the decks, for instance, might be used to save lodging knees in vessels built in other respects in the usual mode. Other parts of it might be applied to the strengthening old vessels, which by this means, might be made to last many years, after they would otherwise have been unserviceable.

The principles of this method of building are capable of being extended still further than they are in the vessel here described: the triangular framing may be even adopted to the construction of fore and aft ribs, so that they may be constructed also of small timber, if required.—Thus, by this means, the former barrier to the increase of size in ships is removed, as it no longer now depends on the size of timber; and ships of any dimensions required may be formed, of any strength requisite of small timber.

The Ship Economy has been four voyages to Demerara, Surinam and the West India Islands, in which she has performed as well as could be desired, and though she has experienced much rough weather, has not sustained the least injury, or required any repair. A certificate of her excellent state, after her last voyage, by Mr. John Peake (a gentleman of the engineer department of the Navy office, whose judgement in similar matters is held in the highest estimation) will be given in another number, together with authentic documents of her satisfactory performance in sailing and other respects, on her several voyages.

For the Belfast Monthly Magazine.

Third Report of the Committee appointed to take into consideration the Acts now in force regarding the use of Broad Wheels; and, to examine what Shape is the best calculated for ease of Draught, and the preservation of the Roads.

AMONG the various particulars to which the attention of your Committee has been necessarily directed, that of suggesting amendments in the laws for regulating the highways and turnpike roads of the kingdom, seemed to be of peculiar importance.

The reports of former Committees have thrown much light upon this most interesting subject, and much additional information has also been transmitted to your Committee since its appointment. For the purpose of rendering the whole as succinct and intelligible as possible, your Committee submit, under distinct heads, certain resolutions which appeared to them to contain the suggestions the best entitled to the consideration of the House, as the basis of a new law, if the House shall deem it expedient to sanction such a proceeding. The subject at the same time is of such general interest, and it is so difficult to form a system of regulations, free from all objections, and applicable to every particular case, that it may be expedient, even if a bill were prepared, to circulate it during the ensuing summer recess, with a view of rendering it, by the observations of intelligent magistrates and others acquainted with the subject, as perfect as possible.

Your Committee also propose, in a separate Report, to submit to the House certain resolutions regarding Mail and Stage Coaches, and other Carriages travelling for hire; and in a third Report, such communications as they have received, regarding the formation of roads, the construction

of carriages, and other particulars therewith connected. When these Reports are completed, they flatter themselves that the whole investigation, in so far as regards parliamentary inquiries, may for the present be brought to a termination.

That the House may the better be enabled to form some idea of the importance of these inquiries, and also of the grounds on which, in addition to the suggestions contained in the former reports, the following resolutions are founded, your committee have annexed, 1, An account of the number of wheel carriages in England and Scotland respectively, and the progressive increase thereof. 2, An account of the number of horses paying duty, distinguishing the various classes in so far as the same can be ascertained; and 3, Some valuable communications connected with the peculiar subject of this report.

On the whole, your committee have come to the following resolutions:

Number one....*Resolutions relative to certain duties incumbent on the occupiers of land adjoining to the Highways.*

1, *Resolved*, That it is the opinion of this committee, that with a view to the preservation of the highways of that part of the kingdom called England, it is expedient that the periods within which certain of the duties to be performed by the occupiers of land adjoining to the highways (in the cutting, pruning and plashing the hedges, topping and lopping the trees, and in the opening, cleansing and scouring of ditches, and the removal of the soil arising therefrom) are to be completed, should be fixed by law.

2, *Resolved*, That it is the opinion of this committee, that for the performance of such periodical duties, general notice affixed on the doors of the church of each parish, sometime in the months of January and September, or either of them as the case may require, should be sufficient notice to the occupiers of land within such parish to compel the performance thereof within the months of February or October and November respectively.

3, *Resolved*, That it is the opinion of this committee, that the penalties enacted by the general highway act, for non-performance of such duties on receiving particular and personal notice, should immediately attach on occupiers of land, if after such general notice the said duties are not completed within the periods which shall be so fixed by law.

4, *Resolved*, That it is the opinion of this committee, that certain penalties shall attach upon each and every surveyor of the highways, and upon every surveyor of a turnpike, usually residing and acting within the parish or district confined to his charge, at the times fixed for giving such general notices, if the same shall not be affixed on the church doors within the period limited for that purpose.

5, *Resolved*, That it is the opinion of this committee, that upon the neglect of the occupiers of land, the surveyors of the highways shall be authorized and required forthwith to execute or cause to be executed such of the said duties as shall not have been completed, and to charge the persons who ought of right to have completed the same, with the expense of the said completion, over and above all penalties for the non-performance of the same.

6, *Resolved*, That it is the opinion of this committee, that if any occupier of land shall at any other period of the year after receiving particular notice from the surveyor of any highway of the omission of any such duty respecting the opening, cleansing or scouring of any ditches, drains or water-courses, or the removal of any annoyance or obstruction, or the cutting, pruning or plashing of any hedge, or the lopping of any trees, or the removal of any other nuisance, omit to perform the same for eight days after such notice, the surveyor shall be forthwith empowered to execute the same and to charge the expense of such execution to the person who ought of right to have done the same, over and above all penalties enacted by the general highway laws for similar omissions.

7, *Resolved*, That it is the opinion of this committee, that the surveyor of the highway, or any other person or persons shall be empowered without

previous notice to remove any hay, straw, stubble or other matter which shall be laid on any highway for the making of manure, or on any other pretence whatever not tolerated by the highway or general turnpike laws, and to convert the same to his or their own use; and that a penalty not exceeding five shillings shall immediately attach on every person who shall wilfully have laid the same on any highway for such purposes, for every superficial land yard or perch of the said highway which shall have been so wilfully covered by the said hay, straw, stubble or other matter.

8, *Resolved*, That it is the opinion of this committee, that double the amount of the penalties attaching upon occupiers of land or other persons offending against these provisions, and against the provisions of the general highway and turnpike laws, shall attach upon the surveyors of the highways and of turnpikes, who after having received notice from any individual of the non-performance of such duties, or of the commission of any offences against these provisions or the provisions of the aforesaid acts, shall omit to proceed in the performance of such duties or the corrections of such offences for double the number of days allowed in each case to other individuals. The notice to be given to the surveyor to describe in a particular manner the duty omitted or the offence committed.

9, *Resolved*, That it is the opinion of this committee, that for the better enabling the surveyors of highways and of turnpikes to remove all annoyances and obstructions, they should be empowered to convey or deposite the matters occasioning the same, whether arising from the scrapings of the road, or other matter in any of the adjoining lands, paying or tendering payment of such sums for the damage done thereby, as may be adjudged reasonable in all cases where the occupiers of such lands are not by law obliged to remove the same.

10, *Resolved*, That it is the opinion of this committee, that the surveyors of all highways, and of all turnpike roads, do make returns to the magistrates of the division assembled at their petty sessions, at their first meetings in the months of December and March respectively, that the periodical duties described in the first of these resolutions are actually and effectually performed, and oftener if required by the magistrates in any particular case, under a penalty not exceeding ten pounds, nor less than forty shillings.

11, *Resolved*, That it is the opinion of this committee, that in the case of roads passing over commons, the occupation of which is undividedly in two or more persons, the surveyors of the highways or of the turnpike road, as the case may be, shall cleanse and scour the ditches and drains, and remove the soil arising therefrom, and charge the expense of performing the same in their accounts; but if it shall hereafter happen that the said commons shall be divided, so that the several parts thereof shall be distinctly and separately occupied by one or more persons, the obligation of performing these duties shall attach on the occupier or occupiers of each separate allotment of land, as in the case of all other lands now held in severalty.

12, *Resolved*, That it is the opinion of this committee, that for the purpose of removing any doubts respecting the extent of the duties now required by law from the occupiers of lands adjoining to the highways, it should be declared and enacted, that the said occupiers are bound at all times to cleanse, scour and keep open as well all the drains, ditches and watercourses running parallel to the lands in their occupation, by the road side, so far as the land in their occupation shall extend, as all such drains as shall enter into and cross the lands in their occupation, so that the water shall have a free course as well by the road side, as into and across their several lands; and the said several occupiers should be authorized and empowered to convert to their own use and benefit the soil arising from such drains, ditches and water-courses, and should be required to remove the same within eight days after the same shall have been cleared out, under adequate penalties; care being taken in all cases that no in-

jury shall be done to the road by such clearing, scouring and removal, saving also all manorial rights.

13, *Resolved*, That it is the opinion of this committee, that the penalty for not removing any nuisance or obstruction within eight days after particular notice, as in the sixth resolution, shall be ten shillings, unless the penalty of one penny per foot shall exceed ten shillings.

To be Continued.

BIOGRAPHICAL SKETCHES OF DISTINGUISHED PERSONS.

ACCOUNT OF THE LIFE AND WRITINGS OF THE LATE ALEXANDER GEDDES, L.L.D.

We have been induced to select for the information of our Readers, the following well written sketch. It appeared in the London Monthly Magazine in the year 1802, *immediately after the Doctor's death.*

DR. GEDDES was born at Arradowl, in the county of Banff, and in the parish of Ruthven, September 4, 1737, old style. His father's name was Alexander Geddes, the second of four brothers. His mother's maiden name was Janet Mitchel; she was born in Nether Dalachy, in the parish of Belay. They were respectable, but not opulent farmers; such as farmers are in that part of the country, subject to grievous oppressions from their landlords. In that station, however, they maintained an excellent reputation, and laboured incessantly to give an education to their children far above their rank. In their religious sentiments they were liberal Roman Catholics, in whose library, we are told, the principal book was an English edition of the Bible, which they taught their son to read with reverence and attention at a very early period: in his infancy, the principal facts contained in that book were familiar to his mind, and, before he had attained his eleventh year, he knew all its history by heart.*

His first schoolmistress was a Mrs. Sellar, whose distinction of him, Dr. Geddes was accustomed to say, was the earliest mental pleasure he remembered to have felt.

He was next put under the care of Mr. Shearer, a young man from Aberdeen whom the *Laird* had engaged to educate his two sons, and with whom the subject of this memoir, the late Roman Catholic Bishop Geddes, of Edinburgh, and another lad about the same age, were admitted to take lessons.

He was afterwards removed to Scalan, an obscure place of education in the Highlands, at which those young persons were brought up who had been devoted to the priesthood, and who were destined to finish their studies at a foreign university. At this seminary, we have reason to believe, young Geddes laid the foundation of that superior skill in the learned languages for which he was afterwards so eminently distinguished. In October 1758, he was sent from Scalan to the Scotch College in Paris, where he arrived about the end of December, after having narrowly escaped shipwreck in his passage from Aberdeen to Camphire. Mr. Gordon was then principal of the College. In a few days after his arrival, he began to attend the lectures in the College of Navarre, and entered immediately into Rhetoric. He soon got at the head of the class, although there were two veterans in it. Vicaire was then professor, and contracted a friendship for him, which lasted all his life.

At the beginning of the next school-year, he should have entered into a course of philosophy, but was persuaded to study philosophy at home at intervals, and to enter in divinity. He attended the lectures of M.M. Buré and De Saurent at the College of Navarre, and of Ladvocat,† for

* See Dr. Geddes' general answer to queries, &c. &c. a work to which, perhaps, without being formally noticed, we shall have occasion often to refer.

† *Professeur de la Chaire D'Orleans:* a Hebrew professorship founded by Louis Duc D'Orleans, son of the Duke of

the Hebrew, at the Sorbonne. Ladvocat was particularly attentive to him, and wished much to have him remain at Paris:—but other counsels prevailed; and he returned to Scotland in the year 1764. On his arrival at Edinburgh, he was sent to Dundee, to officiate as priest to the Catholics in the county of Angus. But he did not remain long in that station; being removed in May 1765, to Traquaire, where he resided nearly three years as domestic chaplain to the Earl of Traquaire. Of this connection he was accustomed to speak with satisfaction and gratitude, as having afforded him much leisure for literary pursuits, and the use of a well furnished library, admirably adapted to assist him in his favourite studies.

He left Traquaire in the Autumn of 1768; and, after a few weeks stay in Angus, returned to Paris, where he remained the following winter; during which he was mostly in the King's and other libraries, and made several extracts from rare books, particularly Hebrew ones.

In the Spring of 1769, he returned to Britain; and undertook the charge of a considerable Roman Catholic congregation at Auchinhalrig, in Banffshire; where, in the summer of 1770 he projected and built a new chapel on the same spot where the old one stood; and soon after made the old house at Auchinhalrig one of the most neat and convenient belonging to the Roman Catholic clergy in Scotland. This, and other unavoidable expences encumbered him with debt; from which he was however relieved by the generosity of the late Duke of Norfolk. He then thought, that a little farm would help him to live more comfortably; but the consequence was quite the reverse; he was obliged to borrow money to stock it, and the failure of three successive crops plunged him deeper and deeper. Another chapel too, which he built at Fochabers, added considerably to the burthen. The publication of his Satires that year brought him in some money, but not enough. Still, however he had spirit and hopes, and he was not, in the end, disappointed. In 1779, he left Auchinhalrig; after having continued during ten years in the assiduous discharge of the various duties belonging to his pastoral office; and when he retired, it was with the most sincere and unfeigned regret of all those among whom he had ministered. The attention which he paid to the instruction of the young had never been surpassed, and but rarely equalled, by any of his predecessors.

His great learning, which began now to be universally known among the literati of the North, obtained for him, in the year 1780, a diploma, creating him Doctor of Laws, from the university of Aberdeen. This was an honour that had never, since the reformation, been conferred by that body on a Roman Catholic.

About this period Dr. Geddes came to London, and officiated for a few months as priest in the Imperial Ambassador's chapel, till it was suppressed at the end of the year 1780, by an order from the Emperor Joseph the second.

Dr. Geddes afterwards preached occasionally at the chapel in Duke-street, Lincoln's Inn fields, till Easter 1782, when it is believed he totally declined the exercise of all clerical functions.

It was at a much earlier period than this that he formed a design of giving a new translation of the whole Bible. About the year 1760 he began to read with this view: he was then acquainted with only two versions of that book, the vulgar Latin and the vulgar English; in favour of the latter he had been much prepossessed in the early part of his life; but when he had acquired a knowledge of the Latin language sufficient to enable him to compare the two translations, he gave a decided preference to the Vulgate. The English appeared to him rugged, constrained, and often obscure, where the Latin was smooth, easy, and intelligible. The former seemed to read like a translation, the latter like an original. "Such, (says Dr. Geddes) at that

Orleans, regent of France, and one of the most pious and learned princes of his age.

time was my opinion; and I confess, that whatever I have since read, has served only to confirm me in it. Let this be called prejudice; I have no objection: but, certainly, it has not been slightly formed, nor blindly followed."

In the year 1762, he began to read the originals, with these versions constantly before him, when he quickly discovered that the great object of the English translators had been to give a strictly literal version, at the expence of almost every other consideration; while the author of the Vulgate had endeavoured to render the original *equivalently*, into such language as was current in his age. Struck with the advantages of the latter method, Dr. Geddes immediately resolved to follow the same plan if he should ever translate the Bible. His original ideas, in this respect, though frequently reviewed by him, underwent but few alterations. The unwearied attention which he paid to the ancient versions in the Polyglot confirmed him in the opinion, that a strictly literal version was not the most proper to convey its meaning, and display its beauties, since even those translators, who had the text to render, not into a different language, but only into different dialects of the same language, had not attempted a strictly literal version; and that those of them who were the least literal, had the most forcibly and intelligibly rendered their text.

"But (says Dr. Geddes) when from the *ancient* I turned to modern versions, my opinion was soon strengthened into conviction. There were seven modern versions to which I had then access—the French, the Italian, the Dutch, and in Latin—those of Munster, Castalio, Junius, and Pagninus. Of these seven, the one which I opened with prejudice, was the one which I read through with the greatest pleasure.

"I had been taught to consider Castalio's translation as a profane burlesque of holy writ. What was my surprise to find, that he had seized the very spirit of the original, and transfused it into elegant Latin! I saw, indeed, and was sorry to see, that, through his excessive refinement, a part of the simplicity of his original had evaporated in the operation; and, in this respect, his version is inferior to the Vulgate: but still the spirit of the original is there; whereas, that of his contrast Pagninus appears like an almost breathless body, dragging along its limbs in the most awkward and clumsy manner; yet this Pagninus has been the general model of vernacular versions."

We have been thus particular in describing the rise of Dr. Geddes' grand work, the translation of the Bible, because it was an undertaking sufficient to immortalize any man, more particularly one who adhered to the general doctrines of a church which absolutely prohibits the use of the scriptures to the laity in their native language.

That Dr. Geddes should have had, among the members of his own church, an host of opposers, will not afford matter of astonishment to any one; he seems to have anticipated obloquy from the rich and the low vulgar, as the principal reward of an almost more than Herculean labour. But he was contented to go through evil as well as good report. He knew he had "not a mercenary soul;" the public knows, and posterity will confess, that he possessed one expanded with the best principles of liberality and disinterestedness. "I expect not (says he) excessive profits from excessive exertions. I trust I shall never want *meat*, and *cloaths*, and *fire*; to a philosophic and contented mind, what more is necessary?"

It appears that Dr. Geddes had been engaged several years in this great undertaking before he saw any prospect of meeting with encouragement sufficient to make it public, if it were completed, and ready for the press. He had, in addition to difficulties common to situations of this kind, to contend with others peculiar to himself. He had a mind ardently intense in the pursuit and investigation of truth. He could not brook error in any person, however exalted, nor would he hear it advanced and maintained, without showing the indignation of a high and noble spirit. The sentiment contained in the pre-

face to his letter, addressed to the English Catholics, was one of the leading maxims by which his life was governed.

"At any rate, I do what I think it my duty to do, and do it fairly and openly. In the following pages, ye will find neither palliation nor disguise. I pour out my sentiments with the same sincerity as if I were before the tribunal of him, who is to judge the living and the dead. Mistake I may, but prevaricate I never will." Such a spirit shown in almost every act of his life, and in all the social intercourses and connections with the world, though meriting the applause of every honourable mind, was not the most likely to conciliate the regards of those who might have afforded him real and effectual assistance.

After he had spent much of his valuable life in biblical studies, he complains of having met with a long and cruel interruption to them, and says, "I had but little hopes of ever being in a situation to resume them, when Providence threw me into the arms of such a patron as Origen himself might have been proud to boast of—a patron, who, for these ten years past, has, with a dignity peculiar to himself, afforded me every conveniency that my heart could desire towards the carrying on and completing of my arduous work." The public are not now to be told that this liberal patron, of high and distinguished worth, and of biblical literature, was the late excellent Lord Petre. For this act of his Lordship's munificence continued through his whole life, and, by his last testament, even beyond it; christians of every denomination, will, when they know how to estimate the advantages of free inquiry, and have sufficiently imbibed the spirit of the gospel, to allow to all men the liberty they claim for themselves, feel sentiments of respect and gratitude. Happy would it have been for the christian world, if Dr. Geddes had found among Protestants another patron who should have shown the same zeal as this Catholic nobleman in promoting the general knowledge of the scriptures. In that case, we should not have had reason to lament, that we are now only in possession of the new translation of the first twelve books of the Old Testament.*

While Lord Petre's generosity secured to our author all the comforts of life, all the means necessary to proceed with his work; it was,

* It will not be thought improper to throw into a note some short account of the early encouragement which Dr. Geddes met with in this work, as stated by himself in his prospectus;—

"I cannot (says he, in his prospectus) refrain at present from mentioning two or three persons, to whom I have had particular obligations;—

"The late Dr. Kennicott (on whose tomb every biblical student ought annually to strew the tributary flower) has a peculiar claim to my grateful remembrance. I had hardly made known my design, when he anticipated my wishes to have his advice and assistance towards the execution of it, with a degree of unreserved frankness and friendship, which I had never before experienced in a stranger. Not contented with applauding and encouraging himself, he pushed me forwards from my obscurity to the notice of others: he spoke of me to Barrington; he introduced me to Lowth. The very short time he lived, after my acquaintance with him, and the few opportunities I had of profiting from his conversation, are distressing reflections; but still I count it a happiness to have been acquainted with a man, whose labours I have daily occasion to bless, and whose memory I must ever revere.

"Another person to whom, if my work have any merit, the world will stand principally indebted for it, is the Right Hon. Lord Petre, at whose request it was undertaken, and under whose patronage it is carried on. For although the plan itself is of twenty years standing, and although the author had never any thing so much at heart as its accomplishment, yet his circumstances in life were such as must have rendered that impossible, without the providential interposition of such a patron. But Lord Petre is not only the author's patron, he is in some respects the author. It was his great love for religion, and his extreme desire of seeing scriptural knowledge more generally promoted, among those of his own communion that suggested to him the idea of procuring a new translation, before he knew that I had ever entertained a similiar idea, and at a time when I almost despaired of seeing it realized."

nevertheless, inadequate to indemnify the expenses of the press. The subscribers were few in comparison of the magnitude of the undertaking; and the volumes already published were finished in a style so handsome, and even expensive, that little, or perhaps scarcely any, profit could have accrued to the author had the whole impression been sold.

In the year 1792, the first volume of this work, dedicated to his patron, Lord Petre, and containing the first six books of the Old Testament, was published. This, he informed the public, had been delayed more than a year by a combination of causes and circumstances, which he could neither foresee nor prevent; the principal of which was a long series of bad health, and a lowness of spirits which accompanied it. "A dangerous fever (says he) and its lasting consequences put a stop to the press work for a whole year. This was to be submitted to with Christian resignation; but the rubs I have received from human malignancy are a trial of patience not easily borne. Will it be readily believed, that these rubs have chiefly been raised by professed Catholics? by members of that very body which I principally meant to serve; by mine own brethren, if brethren they may be called, who *sit down and speak against their brother, and slander their own mother's son!* Ignorance, envy, and malice, in the various shapes of Monks, Friars, and Witlings, have been busy these ten years in depreciating my labours, and assassinating my reputation.*"

Soon after the publication of this volume, three *Vicars Apostolic*, who styled themselves the bishops of *Rama*, *Achantos*, and *Centuriæ*, issued a pastoral letter, addressed to their respective flocks, warning them against the reception and use of Dr. Geddes' version. This episcopal stretch of power, as Dr. Geddes conceived it to be, occasioned a correspondence between him and the bishop of Centuriæ; in the course of which the prelate, availing himself of the authority belonging to his office, declared the Doctor suspended from the exercise of his ecclesiastical functions, unless within the course of a few days he should signify his submission to an injunction contained in the pastoral letter. Little did the bishop know of Dr. Geddes' mind, if he supposed that threats could intimidate, or dread of personal danger and inconvenience could arrest him in his progress. His reply was conceived in a style highly animated,* and well

*See the address to the public, p. 1793.

* The reader will be pleased with an extract from Dr. Geddes' reply to the bishop, after he had received the sentence of suspension;—

"Perhaps, my Lord, you wish to have another occasion of exercising your episcopal authority, and of playing with censures as children do with a new ball—I wish your Lordship much joy of the bauble; but, beware, my Lord, beware of playing too often with it. Read St. Chrysostom on ecclesiastical censures, and learn from him a little more moderation. Permit an *old Priest* to tell you that it is a very great ornament in a *young bishop*. As to myself, my Lord, I am not afraid of your threats, and shall laugh at your censures, as long as I am conscious that I deserve them not. I will never submit to the *injunction*, because I deem it a rash, ridiculous, and informal injunction. If this you think a sufficient reason for declaring me *suspended from the exercise of my orders in the London district*, much good may that declaration do you! The truth is, I exercise no pastoral function in your district: I have neither taught, preached, nor administered any sacrament in it for many years back; I have not even said prayers in any public chapel, for six years at least; to oblige a friend or two. I have, sometimes, not often, said private prayers at their houses; but since you seem to envy me the pleasure of obliging a friend, I forego that too. But, my Lord, you cannot hinder me from praying at home; and at home I will pray, in defiance of you and your censure, as often as I please. The chief bishop of our souls is always accessible; and through him I can at all times, have free access to the Father, who will not reject me, but for voluntary unrepented crimes. In the panopoly of conscious innocence, the whole thunder of the Vatican would in vain be levelled at my head.

You see, my Lord, that I have not required even the short time you grant me, to signify my disposition to submit to the injunction in your pastoral letter. Such a submission, my Lord, will never be made by ALEXANDER GEDDES,

A Priest in the Catholic Church.

adapted to the circumstances of the case. And, in a short time afterwards, he published a much longer letter to the bishop of Centuriæ, with a short preface addressed to the English Catholics; in this he says, "I trust ye will not deem it presumption in me to grapple with bishops; indeed, I would boldly grapple with Popes, if Popes dared to injure me. Our Catholic ancestors frequently grappled with them, and sometimes came off victorious. A Pope, and consequently a bishop, may do wrong, and, if he do wrong, may be told of it even by an inferior."

It was not till the year 1797, that the second volume of the translation was given to the world, which was dedicated to her Royal Highness the Dutchess of Gloucester, as an "early, spontaneous, and liberal encourager of the work." In the preface to this volume, Dr. Geddes distinctly gives up, and boldly controverts, the popular doctrine of the absolute and plenary inspiration of the scriptures; he considers the Hebrew historians to have written, like all other historians, from such human documents as they could find, consequently, like them, were liable to mistakes; that they were not more intelligent and judicious, and were equally, at least, credulous. In the scale of merit, he ranks them much lower than the more celebrated historians of Greece and Rome, because, after carefully perusing them, and properly appreciating their value, he was unable to find in the Hebrew writers that elegance, correctness, and lucid order, which were to be found in the Greeks and Romans.

"It would (says Dr. Geddes) indeed, be unfair to weigh them in the same scale. The Hebrew historians have a greater resemblance to Homer than to Herodotus, and to Herodotus than to Thucydides. To the first of these writers they in many respects bear a striking similitude. Like him, they are continually blending real facts with fanciful mythology, ascribing natural events to supernatural causes, and introducing a divine agency on every extraordinary occurrence. The same simplicity of narration, the same profusion of metaphors, the same garrulous tautology pervade them both: in both we meet with *poetical history*; the effusions of a warm imagination, tracing with boldness inaccurate resemblances between the operations of nature and the petty artifices of men."

Such was Dr. Geddes' theory as to the foundation of the Jewish scriptures, which, if generally adopted he thought would be attended with several important advantages, such as divesting the adversaries of religion of their most formidable and offensive weapons—of getting rid of a cumbersome load of useless commentators, which serve only to puzzle when they profess to explain; and biblical criticism would be reduced to one single object; namely, to ascertain the genuine grammatical meaning of a genuine text;—and of obtaining, among persons of all descriptions, a more general attention to the Hebrew scriptures.

With such notions it will be readily imagined, that our author would give up as fabulous, and totally unworthy the divine goodness, such commands, precepts, and injunctions, as should seem to his mind unworthy even of human authority. In this view of the subject he denied, that the command given to destroy the Canaanites could be of divine origin.*

In his volume of Critical Remarks, published in the year 1800, he entered

* "After all that has been written, either by Jews or Christians, in defence of this sanguinary measure, I confess that my reason and my religion continually revolt at it; and I cannot bring myself to believe that such an order proceeded from the mouth of God; perhaps not even from the mouth of Moses. I am rather willing to suspect that it is the fabrication of some posterior Jew to justify the cruelties of his nation. And indeed it is the shortest way to justify any measure, and to obviate all troublesome objections. Such a command could not be unjust, since God authorized and commanded it; who will presume to say that what God commands is unjust? True, but then we must be first well assured that he has commanded; and the very appearance of injustice in the act is to me a stronger proof that he did not command it, than the authority of all the Jewish historians put together." See preface to vol. II. of Dr. Geddes' translation. p. ii.

into a full vindication of his theory.* If the mention of obnoxious opinions created him an host of opponents, a justification of them was not likely to abate their fury, nor very much to diminish their number. He foresaw that, as he wrote to please no party, he must have enemies in every party. The Trinitarian, Arian, and even modern Unitarian, quickly discovered that the translator of the Bible was but a covered infidel. Some warned their respective hearers from encouraging and reading such a work, as having the worst tendency; others, though persecuted themselves for dissenting from and oppugning the popular and established dogmas, yet felt indignant that Dr. Geddes should believe so little—should concede so much. "*Can such a man be a christian?*" says one, whose own faith has a hundred times been matter of discussion by others. "If indeed," says another, he "believe enough to satisfy his own mind in calling himself a Christian, yet he cannot be a Catholic." To these doubts and queries proposed to the Doctor in all shapes, and upon a thousand different occasions, he once thought it worth his while to reply.

The questions then proposed were, "Sir, are you a Roman Catholic? Sir, are you a Christian?" To the latter of these queries, I answer positively, I am a Christian. In order to give a just and *cautious* answer to the former, I must consult my old friend and countryman Duns Scotus. Now Duns Scotus instructs me (very properly) to make a distinction between the two terms; and to say: A Catholic, I am *absolute*, a *Roman* Catholic only *secundum quid*." If the querist understand Latin and Logic, he will be at no loss to comprehend my answer; but in case he should be a mere English Scholar, and for the sake of other English readers (if there be any) who may entertain any doubts about my Catholicity, I will make my distinction as clear and explicit as he or they can wish. If by the epithet *Roman* be only meant holding communion with the see of Rome, and acknowledging the primacy of its bishop, I am certainly so far a Roman Catholic: but in any other sense or respect I am no more a Roman, than I am a French, German, or Spanish Catholic. If to the appellation *Catholic*, any discriminating adjunctive were necessary, I would call myself a British Catholic; but I rather adhere to the simple declaration of an ancient martyr: *Christian* is my name, and *Catholic* my surname." See Dr. Geddes' general answer to the queries, &c. &c. 1790.

In the preface to the critical remarks, he makes an explicit avowal of his faith. "The gospel of Jesus is my religious code: his doctrines are my dearest delight: his yoke to me is easy, and his burden light; but this yoke I would not put on; these doctrines I could not admire; that gospel I would not make my law, if reason, pure reason, were not my prompter and preceptress. I willingly profess myself a sincere, though unworthy, disciple of Christ: *Christian* is my name, and *Catholic* my surname. Rather than renounce these glorious titles, I would shed my blood: but I would not shed a drop of it for what is neither Catholic nor Christian. Catholic Christianity I revere wherever I find it, and in whatsoever sect it dwells: but I cannot revere the loads of hay and stubble which have been blended with its precious gems; and which still, in every sect with which I am acquainted, more or less tarnish or hide their lustre."

Such was the creed of the man who has been repeatedly calumniated and mal-treated as an infidel and heretic, whose name, by many, was never mentioned without reproach. But among the truly learned, candid, and liberal of every sect, Dr. Geddes had steady friends, whose affections and regard no discordancy of opinions could alienate. Indeed it would have been strange if there had not been found many persons capable of appreciating the various excellencies

* In a little Latin poem at the end of this volume, Dr. Geddes gives an answer to the question, whether he thought Moses had been inspired. The initials at the head of these lines are generally supposed to refer to the Rev. Dr. Disney, whom Dr. Geddes used to consider, next to his patron, as his best and most intimate friend

attaching to the character of Dr. Geddes. Where virtue and science unite in the same mind; where great talents and high attainments are combined with integrity, honour, and benevolence in the intercourses of social life, with a sacred regard to truth and liberty, to the honour of God and of rational religion; whatever be the theological creed of such a person; to whatever church or communion of christians he belongs, he must claim, and will enjoy, the respect such a combination of eminent qualities will necessarily command.

In Dr. Geddes these qualities were united in a very remarkable degree; as a man of extensive learning, his various works, but especially his translation and critical notes, will afford the most ample testimony to the present and to succeeding generations. With respect to some other topics, a learned Italian declares, that he never knew out of the Papal dominions a person more deeply learned in the ecclesiastical history, canon law, the liturgy of the church, and the diplomacy of the court of Rome, than Dr. Geddes: nor does he believe that many of the higher clergy belonging to the Papal church could have rivaled him in these branches of study. The qualities of his heart were not less amiable and estimable, than his talents were transcendent. Of his integrity, honour, and benevolence, many are the living witnesses: many mourn the loss of a man, whose wit and vivacity heightened the joys of their social parties—whose good humour and pleasantry never failed to exhilarate the spirits of those about him. That he was irritable in some respects, will not be denied: but he was never malignant; never vindictive; "Never did the sun go down upon his wrath." His zeal for what he conceived to be the truth, upon all subjects, led him to a kind of eagerness in the assertion and maintenance of his opinions, which by persons ignorant of the man was sometimes mistaken for a dogmatical temper. But no one was more ready than Dr. Geddes to admit every man to the proper enjoyment of his own creed. He was in the strictest sense of the word a truly genuine Catholic; his goodwill extended to all of every sect and party.

His writings exhibit in a complete point of view the spirit, and ardent feelings of the man. Though many of them are monuments of profound erudition, of indefatigable study and researches; yet there are others, known by his friends to have been his composition, though without his name, which bear the marks of superior genius, sprightliness, and wit.

Besides the translation of the early books of the Bible, and the Critical Remarks we should notice as highly deserving the attention of the biblical scholar, the prospectus of a new translation of the Bible 4to. 1786.—A letter to the bishop of London on the same subject, 1787.—His proposals came out in 1788.

In the year 1790, he published a general answer to the queries, councils, and criticisms respecting the intended translation: a work highly interesting and entertaining.

In 1793, he wrote an address to the public, on the publication of his new translation:—and in the succeeding year, his letter to, and correspondence with, the bishop of Centuriæ, were published.

As a controversialist, Dr. Geddes distinguished himself in the year 1787, by a letter to Dr. Priestley, in defence of the divinity of Jesus Christ; and by a letter to a member of Parliament, on the expediency of a general repeal of all penal statutes that regard religious opinions.

In a modest apology for the Roman Catholics of Great Britain, published in the spring of 1800, Dr. Geddes has displayed much zeal in defence of the tenets to which he adhered; great moderation when descanting upon the injuries to which himself and brethren were subject, by the continuance of persecuting laws; and sound reasoning when he argues in behalf of the justice and policy of abolishing all legal disabilities for conscience sake.* This work deserves

* Speaking of the Catholics, in the preface to his *modest apology*, Dr. Geddes says, "if in some respects they appear unsocial, it is chiefly owing to a foreign education; which they have been long obliged to mendicate in abroad, and which gave them uncouth, uncourtly habits they

the attentive perusal of the liberal and candid of every sect. The author has taken large and comprehensive views of his subject: and has, in the discussion of it, displayed great ingenuity and acuteness—very extensive reading—great variety and depth of learning—uncommon vigour of thought and energy of diction.*

In pursuing his great work, Dr. Geddes intended next to have presented the world with a new translation of the book of psalms; but during the last whole year of his life, his studies and literary labours were greatly interrupted by a long series of painful affliction: yet in every interval of ease he applied to a work in which his heart was engaged. He had already printed in an octavo size one hundred and four of the psalms, and had prepared completely for the press as far as the one hundred and eighteenth psalm, when he was arrested by a most painful and excruciating disorder, which terminated his valuable and important life on the 26th of February, 1802.

Though in that interesting moment, "some pious drops the closing eye requires;" yet it is to be regretted that Dr. Geddes could not experience the tender charities of domestic affection, nor derive consolation from the kind and soothing attentions of any person nearly allied to him by the ties of consanguinity.

He has left one brother, who is a Monk of the order of St. Bennet, and now resides at the Scotch Monastery at Würzburg, in Franconia.

On the following thursday, his remains, attended by a number of respectable friends* zealously attached, to Doctor Geddes during his life, were conveyed to Paddington churchyard, where they were deposited according to his own wish.

It was a subject of melancholy pleasure to behold at this parting scene, persons of different sects, and attached to the opposite prevailing political parties. Catholics and Protestants; Churchmen and Dissenters; Whigs and Tories; all forgot their differences, and united to pay a common and unfeigned respect, to the memory of one whose life had been consecrated, in a great measure, to a labour in which all are deeply interested.

We cannot better conclude this sketch than in the words of one of Dr. Geddes' very intimate friends.

"It must," (says he) "be lamented, that in the death of Dr. Geddes, the world has lost the services of a man, who by his acute and penetrating genius—his various, profound, and extensive erudition—his deep research—his indefatigable application—and his independent, dignified, and unfettered spirit, rising superior to the prejudices of education; nobly disdaining the shackles of system; spurning the petty temporizing arts of inmanly accommodation; and setting at defiance all the terrors of malignity, bigotry, and intolerance,

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seldom overcame. Some vestiges of this education are still visible; but time will efface them, and has already, in a great measure, made them less apparent. Communicate to them the blessings of British freedom, admit them to a participation of British privileges, open to them the way to meritorious preferment, humble them not by special restrictions, disgrace them not by peculiar disabilities, put it in their power to blend with society in every place, and on all occasions, without marks of ignominy on their faces, and they will soon become as social as any other members of society. Their prominent features will be softened down to the common stamp; and Papist and Protestant will, in the intercourse of life, resemble one another so much, that their respective peculiarities will hardly be discernible."

* The lighter works of Dr. Geddes, both poetical and satirical, are very numerous; but as they are not identified by his name, and as he expressly desired and intreated the public not to give him credit for any publication to which his name is not affixed or prefixed, the writer of this article does not think himself justified in giving a full list of all the works generally supposed to be the Doctor's productions.

* Among these were Mr. Timothy Brown, whose steady and generous patronage during the latter years of his life always occasioned the Doctor to speak of him with the warmest emotions of gratitude, and deserves in this place a distinguished notice; also, Doctors Crombie, Calder, and Disney; Messrs. Ring, Good, Jervis, and Chalmers.

was supereminently qualified for the laborious and important work in which he had for a long series of years been engaged, of giving an English version of the venerable literary remains of sacred antiquity, the scriptures of the Old and New Testament. This was the work and the labour of his life—the object which he ever kept in view, and the pursuit from which he never deviated, but at short intervals, to relax and and unbend his mind by lighter occupations, and studies less severe; but still returning to his proper and favourite occupation with greater relish and delight. During his life, this undertaking did not meet with encouragement adequate to the magnitude of the design; or, it may be added, to the merit of the execution. In this last respect, it will be matter of surprize to all who are competent to judge of the nature of such an enterprize, how much has been done, and with what uncommon ability and success. It every where displays the skilful hand of a master. Some few exceptionable passages might perhaps be pointed out. But, is it not matter to be wondered at, that a greater number has not occurred? Had no defects appeared, then indeed the world might have seen, what it has no right to expect—what is not the privilege of human nature to produce; and what the translator never had the arrogance to propose—a perfect work. Some verbal alterations might, even in the opinion of Dr. Geddes' most ardent friends, have been made with advantage.*

But, here, so pertinent and just is the sentiment of that great master of the art of criticism, whose works he always read with delight and enthusiasm, that the application cannot be resisted:

Ubi plurima nitent——non ego paucis
Offendar maculis, quas aut incuria fudit,
Aut humana parum cavit natura.

Had this great work been brought to a conclusion, with the same ability with which the venerable translator had begun it, it might justly have been considered as an honour to the country, and the glory of the age in which he lived. However it may be regarded by the narrow-minded and the illiterate, it will be the subject of lasting and sincere regret to all the enlightened friends of free inquiry—of biblical learning and sacred criticism, that the work is now left in an unfinished and imperfect state, by the death of the incomparable author. And this event must continue to be still more deeply regretted if, as there is reason to fear, the loss be irreparable; if there be no possibility of finding another person capable of carrying on the same design, and of following with equal steps in the same virtuous and honourable career, so generally competent, so highly accomplished, so variously and so amply furnished, for executing this grand desideratum of the learned and the christian world."

* The confession which the translator himself has made upon this subject, reflects great honour on the candour and liberality of his mind. Those therefore, who object, should do him the justice to examine his note on Exod. 12 11. After a learned and curious disquisition on the meaning of the term *Passover*, and remarking that it does not express the meaning of the original word, he adds, "it would have been better, perhaps, to retain the Hebrew word, as most of the ancients, and several moderns, have done;" and afterwards, "To put a short end to this controversy, let *Phasah* be restored in my version throughout the first volume, as it has been done throughout the second; and let the reader affix to it what meaning he pleases." See critical remarks, p. 210.

DISCOVERIES AND IMPROVEMENTS IN ARTS, MANUFACTURES, &c.

Patent of Mr. Thomas Mead of Scalcoates, Yorkshire, for a Rotative Steam Engine, Dated August 1808.

THE part of this engine, in which the pistons operate, consists of a hollow ring (sufficiently large to contain them in its transverse direction) in whose internal diameter is placed a hollow disk, which communicates with the cavity of the ring all round

The figure of this part of the engine will also be produced by causing a circle, to whose side a narrow parallelogram is attached in the direction of one of the radii, to revolve round the farther extremity of the parallelogram at right angles to its plane.

This containing part or barrel, of the engine is divided in the direction of the plane of the disk, so that each half consists of a flat plate and an open cavity containing half the ring, which is furnished with a flat flanch all round, for uniting it to its corresponding part.

Within the hollow ring two pistons work at right angles to its plane, one of which is joined to a solid axle (which passes through the center of the hollow disk) by a flat circular plate of the same diameter of the disk, and the other is united to a hollow axis, or tube (which surrounds one half lengthways of the solid axis) by a flat circular plate similar to the other.

At the inside of each surface or plate, of the hollow disk, is a cavity all round, in which is placed a ring at the bottom, while the rest of the cavity is stuffed with oakum. Screws pass through the plates of the disk, so as to press against this ring, by whose action it is forced against the plates which connect the pistons with the axis, so as to prevent the passage of steam in that direction. Each plate of the hollow disk is also furnished with a short projecting pipe, or hollow boss, at its center, for the better passage of the axles through it.

The solid axle, and the hollow axle which surrounds it, has each a crank attached to it, at whose extremity is placed a friction wheel, whose plane is at right angles to the direction of the axle. These friction wheels work in a groove that runs across the face of the fly wheel in the direction of its diameter; for which purpose the fly wheel is placed so that its plane is at right angles to the axles to which the pistons are fastened, while its center is fixed at such a distance from the said axles, that the middle point of the friction wheel, at the extremity of its crank, may reach a little way beyond this center.

Two holes are made in one of the portions of the hollow ring, near the circumference, and about a tenth of it, or 36 degrees from each other;—from one of which a pipe passes to the boiler to convey the steam, and from the other, another pipe extends to the condenser.

When all the machine is put together, the fly wheel is in a vertical position, as usual; the plane of the hollow ring parallel to it, and the axis of the pistons at right angles to its surface.

On account of the position of the friction wheels in the groove of the fly wheel, and the machinery to which they are attached; if the fly wheel is turned round, each friction wheel will alternately move from the center of the fly wheel to its circumference and back again at each revolution; and of course the speed with which they will be carried round, will alternately pass from a maximum to a minimum, and while close to the center, will experience scarcely any motion forwards; but when near the circumference will move as quick round as that part of the fly, and the two pistons, from their connection with them, will be carried round with a similar varying velocity, which will in each piston, through the greatest part of its course be the reverse of that of the other, for while one piston is nearly motionless, the other will be moving round with its greatest velocity.

It is on this last circumstance that the motion of the engine depends, for each piston being thus alternately rendered nearly motionless (by its connection with the fly) serves as a fixed basis, against which the expansion of the steam may re-act to force the other piston forward, and the passages to the steam and the condenser being placed facing the arbor of the fly, one of the pistons will remain in the space between them, for the greatest part of each revolution, and will not pass by one of these passages, till the other piston, forced round in the opposite direction, will have passed the other, and of course have entered the space between them, from which the first is about to depart.

The edges of the pistons are grooved all around, for the better holding of the packing, and all the parts which work in contact are ground so as to work true and fairly and be impervious to the steam.

A current of water, of air, or of gas, may work this engine in a similar manner to the steam. And if its action is reversed, by applying a power to turn the fly wheel, it may be used as an engine to force water upwards, for extinguishing fires, or for other purposes. It may be also used for an air pump in the same manner, either for philosophical purposes, or for the condenser of a steam engine.

A method is described by the patentee of making the engine work with two solid axles, instead of with a solid and a hollow one. He has also recounted some other forms for the barrel of the engine, by which the same motions may be produced, but the combination above related, seem much superior to those variations.

The Patenteestates that he has established a manufactory of these engines at Hull, under the firm of Mead, Penrose and Co. and states that he can make them cheaper, and far less complicated, than any other steam engines hitherto erected, with superior performance; and at least equal to any that *may be made hereafter*.

Remarks...Particular pains have been taken to describe this curious engine as accurately as possible; but such is the difficulty of doing this without a plate, that the writer almost despairs of conveying an adequate idea of it, notwithstanding his best endeavours to do so, and would not have attempted it, but for its very singular formation. Those who wish to see a plate of it, will find one in the Repertory of Arts, No. 91, and even with this assistance the specification in that work will require some study to understand it, though very fairly and properly drawn up.

Mr. Mead's revolving steam engine, is certainly one of the most ingenious combinations of mechanism, that has been brought before the public for some time, and on this account does great credit both to the mechanical knowledge, and inventive powers of its author. It is also superior in the contrivances for making its several parts impervious to steam, and to wear truly and fairly, to any rotary engine as yet described in print. It is besides simpler than most repercussive, or alternating, engines from requiring no beam, no valves, and of course none of the complicated apparatus used for these parts. On the other hand it is necessary to state that it is defective in the principal point, in which rotative engines are designed to be superior to the repercussive kind in common use.—In the common engines there must be a loss of momentum at every change of direction of the motion of the piston, and as loss of momentum is loss of power, and that a loss of expence, a good rotative engine has been always a desideratum, from the idea that in it there would be no loss of momentum. Now in Mr. Mead's engine the two pistons, and the parts connected with them, alternately stop still, for some time in each revolution, and at such time must lose all their momentum; wherefore in this point, this rotative engine is in no respect better than a common repercussive one.

As to its working without a beam, many of the latter sort are now made to do so also; and the system of the valves has been reduced to such great simplicity and cheapness by the inventions of Mr. J. Dickson (for which he has obtained a patent, which is described in the Athenæum, vol. 4. p. 255) that very little more can be saved now on this point.

The difficulty of packing the pistons, &c. of Mr. Mead's engine, remains an objection against it, as well as against all the rotative engines yet brought before the public; and although it is much superior to most of them in this respect, still the whole of it must be taken asunder every time the packing requires to be renewed, which is a considerable inconvenience.

In using this machine as a pump for raising water, it will be necessary that the arms of the cranks should extend farther beyond the arbor of

the fly, than when it is used as a steam engine; for if this is not done, when the groove of the fly comes to a position at right angles to a line drawn from its arbor to the axle of the engine, it will act on the crank which is before its line of motion, in such a very acute angle as to risk breaking, or displacing the axle, or itself.

This engine has no advantage over a common pump in raising water, because its pistons coming to a state of rest in each revolution, as effectually stop the momentum of the water as the alternating motion of the pump does, and there will be as much time lost in the slow part of this revolution as in the descent of the pump rod; but if by a variation in the mode of moving the cranks, each piston was made to move round alternately with a uniform velocity, while the other was at rest, then the water would be raised in a continued flow, without any loss of momentum, and the engine would be much superior to the common pump in its effects. This improvement most probably could easily be effected by the ingenious inventor.

It seems very doubtful, when the nicer workmanship of several parts requisite for Mr. Mead's engine is considered, whether he could sell those of equal powers to common steam engines for a less price, as he asserts. But this can be only determined when he publishes his prices. But let this be as it will, however Mr Mead may exalt the merits of his engine, above all yet erected, it certainly is bordering on the presumptive, if not entirely within its limits, to declare as he has done, that no steam engine will *ever* be made superior to his. This the writer has the best reasons for denying, exclusive of the impossibility of Mr. Mead's having been able to dive into the fathomless abyss of futurity, and bring up with him an account of all possible contingencies on any subject whatsoever. The great ingenuity of the contrivance may however very well excuse this little ebullition of vanity in the inventor of this singular rotative steam engine, which from the very curious combination of its parts must give pleasure to all amateurs of mechanism.

Patent of Mr. Richard Trevethick of Rotherhithe, Engineer, and of Mr. Robert Dickinson, for a method of stowing Ships, by packages (cases) of a kind not hitherto employed, for containing goods. Dated October 1808.

Instead of the casks, chests, and various other receptacles (for containing goods, provisions, or liquors, for transportation) which are usually made of wood, the specification of this patent, proposes the introduction of iron cases, "made by casting, forging, laminating and rivetting together plates of this metal, with covers capable of being secured to them by bolts, screws, or by other means, and so as to render them impenetrable to the external air and moisture."

These iron cases are mostly made in the form of rectangular or hexagonal prisms, to prevent the waste of stowage, which cylindric shapes occasion, which are never used for them, but when economy of space is not requisite.

In these iron cases it is asserted that water, oil, and various other fluids, as well as provisions of different kinds, will be better preserved from waste, putrescency, leakage, and the depredations of vermin, than in wooden vessels; and for the purposes where it is expedient, these iron cases, are tinned on the inside, or coated with a varnish, suited to the articles they are destined to contain.

In a pamphlet published by the patentees, on the advantages of their iron cases, or casks, a calculation is inserted, by which it appears, that the difference of space occupied by a ton butt of wood, and one of the iron vessels, containing an equal quantity, would be 160 gallons. A wooden water cask of this size, or containing 250 gallons, is an inch and a half thick, and has 57 gallons of solid wood, and loses at the chimes at each end 14 gallons more; making in all 71 gallons loss. But an iron cask, containing the same quantity being only three sixteenths of an inch thick, has but 7 gallons of solid iron, and having no chimes, gives an advantage of 64 gallons; besides this the space lost between the wooden cask and those

next to it, on account of its round outline, will amount to 63 gallons more; to which is to be added a loss of space by fathom wood, stowed between the casks, equal to 35 gallons, making in all 109 gallons loss by the wooden butt; from which 7 gallons being deducted, for the solid contents of the iron in the iron cask, leaves 162 gallons in its favour against the wooden butt. Over casks of other dimensions, the iron cases will have a similar advantage.

In the package of oil in wooden casks the loss by absorption and leakage, is never less than 16 per cent; and the injurious effects of wood on malt liquors, fresh water, and other liquids, is known to every chemist.

The objections with regard to the rusting of iron vessels are answered, by the fact, that iron hoops, which are not one-third of the thickness of these vessels, and are besides exposed to the corrosive acid of the wood, last more than four years; the iron casks being three times as thick will last more than twelve years without varnish; but with this defense, the Patentees assert they will escape rust altogether.

To move these iron casks, which are square or polygonal, it is proposed to have two strong moveable hoops adapted to them which when put round them, will enable them to be rolled with the same facility as round casks.

The high price of wood for staves and the difficulty of obtaining them at present, give an additional advantage to iron casks, which can be procured at the rate of six pounds per ton, whereas the average price of wooden casks is above ten pounds per ton, and probably will increase still more.

In whale ships, wooden casks last but two voyages, but the iron ones will last ten voyages, if what the Patentees assert is true and as they can also be filled with hot oil without loss, which the others cannot, they will have a peculiar advantage for this service.

The Patentees assert that in the navy £500,000 per annum might be saved by the use of their iron vessels for stowing water alone, and the details they have given make this highly probable.

Remarks....There can be little doubt that these iron casks would be highly serviceable for stowing biscuits, peas, flour, oatmeal, cheese, and most other kinds of dry provisions, and would preserve them effectually from injury by vermin. They would also answer well for tallow, oil, turpentine, and probably also for sugar, for holding fresh water they might succeed well likewise. and deserve a fair trial for this purpose. But whether they will do for holding salt provisions, or may be filled occasionally with salt water without damage, as the Patentees assert, or will be fit for containing beer, spirits, wine and other liquors of this nature, is extremely doubtful. For if they are ever so well varnished, the slightest crack will admit the salt liquor in the first case, and the acid fluids in the other, to penetrate a little way under the varnish, the consequence of which will be a swelling of the iron underneath, from the rust these liquors will occasion, which will force off some of the varnish in scales, a larger surface will then be exposed to the action of the liquor, and this process will be repeated, till by degrees the whole of the varnish will be detached, the iron cask entirely corroded, and the whole of the liquor spoiled. Spirituous liquors dissolve iron also, which both injures their colour and taste. As a mixture of iron with fresh water, is rather wholesome than otherwise, iron casks would probably be very fit for containing it; cast iron may be said to be already proved to be adequate for this purpose, by the vast quantity of large iron pipes, used for conveying water to London, by the New river company, which are found to last many years, and to rather improve the water.

The manner of making the casks, may be easily understood, from the account of them, inserted in the above specification. A more particular description of them would however have been given by the writer, (who when in London a few months ago, went to the house of the Patentee, to request permission to see them) but

that he was refused this small favour in a very churlish manner, by Mr. Dickinson, who declared that no *wise Patentee* would ever wish his invention to be described, or remarked on in print. How far his wisdom has been consulted in the late publication of his specification in the Repertory of Arts is not apparent; but it may be that on this occasion he was overruled by his partner, Mr. Trevethick, the well known ingenuity of whose inventions on other occasions, makes it probable that he was the author of this plan for using iron casks: the merits of which, have we trust, been here discussed in the same just and impartial manner, that we have always followed: which so far from being any prejudice to Patentees, must in reality serve all those, whose intentions are honest and upright, both by the publicity it gives their inventions, and by leading to the detection of errors, the acting on which might be highly injurious, both to themselves and the public. As to Patentees who are less scrupulous about deception, and would wish to take advantage of the ignorant and unwary (though such occur much seldomer than is suspected in general) it is not very necessary to be over delicate about their opinions; on the contrary we think it the duty of every honest man that can do so, to put the publick on their guard as speedily as possible against their evil intentions.

The nature of the plan for which the patent here recited has been procured, being perfectly fair, honourable and beneficial to the publick (and if it was not so, we think Mr. Trevethick would not permit his name to appear to it) it is hard to conceive the principle on which his partner should be so averse from having an account of it given in the periodical publications.

On Broom Flax, by Mr. James Hall of Walthamstow.

Phil. Mag v.34, p.378.

To procure the flax of broom, it is only necessary to steep the twigs, or former year's branches (the most vigorous shoots of which are the best) for two or three weeks, more or less according to the heat of the weather, in stagnant water; or to boil them for about an hour in water. This done the flax comes freely from the twigs; and where there is not machinery for the purpose, may be easily peeled or stripped off by children or others, at any time when not quite dry, in the same way as hemp is peeled from the stalks. The twigs on being cleared from the flax, and steeped for some time in boiling water, become tough and beautifully white, and are worth about from a shilling to eighteen pence a pound, for making carpet brooms.

When stripped from the twigs the flax requires only to be well washed in cold water, then wrung and shaken well, and hung out to dry, previously to its being sent off to the paper manufacturers, or applied to other uses.

Mr. Hall recommends the cultivation of this plant very much to the poor of Ireland and Scotland, he has sent specimens of the broom flax to the Royal Society, to the Board of Agriculture, to the Society of Arts, to the British Musæum, and to other places.

He observes that the idea of geting flax from broom is not new;—though as he mentions it as a discovery in part of his paper, it is probable he did not know this at first; he has made many experiments relative to this flax, which have confirmed his opinion of its utility.

Remarks....The use of broom flax is very ancient in other countries, and has been long known in England; but notwithstanding this, Mr. Hall, is not without merit, for endeavouring to excite the attention of the public to what has fallen into undeserved oblivion. An extract made on this subject, more than twenty years ago (we believe from the Annual Register) is now in the hands of the writer, of which the following is a copy.

"The small twigs of Spanish broom give a material for making linen.

"For this purpose they must be gathered in bundles, laid in the sun to dry, then beat with a piece of

wood, and left to steep in water about four hours; after which they are to be placed in a heap together in a hollow place, and covered with straw. They are to be left thus for eight or ten days: a little water is to be sprinkled over them every day, and after this the green rind comes off easily. They are then to be beaten with a mallet on a stone, and then untied and spread to dry, after which the material may be dressed in the same manner as flax.

"The green twigs of broom, are good food for sheep; and the flowers afford excellent nourishment for bees; sheep should not be let to feed on the broom, until it is three years old; and it should be pruned after the sheep have eaten off the twigs. It thrives best on a sandy or stony soil."

Some circumstances in the paper from the Philosophical Magazine, give reasons to suppose that the author of it is Sir James Hall.

Report on a method employed to destroy the smoak of a steam engine, at the Mint in Paris; by M. Guyton de Morveau, and M. de Prony. Annales de Chemié.

The boiler of this steam engine, is of a cylindrical shape, headed by a hemisphere. The plan of the fire place is of course a circle; and the grate is a square inscribed in the circle. The door by which fuel is introduced, at the extremity of one of the diameters of the fire place, answers to an opening placed at the other extremity of the same diameter, by which the flame escapes to circulate round the boiler, following a channel made in the brick work round the sides. This channel terminates, after an entire revolution, in a chimney communicating with the external air.

Two other channels made in the brick work, which are always open, are on the two sides of the door of the fire place, and make each of them half a revolution, in opposite directions, below the channel of circulation that envelopes the boiler, in order that they may open on the two sides of that opening of the fire place, by which the flame enters into the channel that causes it to circulate round the boiler.

From this construction the two currents of air, introduced by the two channels just described, as soon as the door of the fire place is closed, unite into a single one, which rushes along with the flame into the channel of circulation. The vapourized part of the fuel, which is not yet consumed, and would produce the smoke, preserving by these means a temperature sufficiently high to separate the principles of the atmosphere and to unite with the oxygen, is burned before it arrives at the chimney, which only receives transparent gases. The caloric disengaged by the combustion of the smoke, contributes to the heating of the boiler.

These effects take place during the whole of the time, that the door of the fire place is shut, but as soon as it is opened, to introduce fresh fuel under the boiler, the combustion of the smoke immediately ceases. But it will be very easy to avoid this inconvenience in future by constructing the furnaces after the manner of those called athanors, in which the fuel is introduced and renewed by means of a *slow harry*, so that the fire place is constantly closed.

After this account of the furnace which consumes its smoke, Messrs. Morveau and Prony trace back the first invention on the subject to M. Dalesme (the author of many ingenious discoveries described in the volumes of the Academy of Sciences) who before the year 1669, made a fire place that burned its smoke, by constructing it in the shorter leg of a reversed syphen, which caused the flame to be drawn downwards through the grate and burning fuel. Delabire also made some experiments on the subject, and inserted a note on the process of Dalesme in the volume of the academy for the above-mentioned year. Both their methods are described in Boerhaave's chemistry, and were usefully employed in the 17th century, in several manufactories.

The authors then recount the theory of combustion, on which the following chief conditions for consuming smoke principally depend.

1. Such a disposition of the fire place, that a current of air may be established, flowing through the door, or some opening into the chimney.

2. The flowing of a mass of air upon the fuel in a proper proportion to its quantity, in such a manner that the fuel shall find in the air which comes in contact with it, such a quantity of oxygen, that all the molecules of the fuel, which are capable of being combined with that part of the air, shall unite with it.

3. A sufficient elevation of the temperature at the place of contact of the air with the fuel, to cause the decomposition of the air.

For the second condition, experience shows, that a much greater quantity of air is necessary, than what contains the exact portion of oxygen strictly required by the combustion, supposing that this oxygen was pure, or previously separated from the azote.

Argand lamps offer an application of these principles, which is as curious as it is useful. The rack which allows the wick to be lengthened or shortened, furnishes the means of always proportioning the mass of the burning body to that of the air, which passes through and surrounds the flame. This proportion is so indispensible, that as soon as it is altered, by uncovering too much of the wick, smoke is immediately produced. A manufacturer of these lamps, in order to increase the light, by procuring means of uncovering more of the wick, without producing smoke, made several small holes in the glass chimney immediately above the groove in which it is placed, and by thus augmenting the quantity of air to be decomposed, he is able to increase proportionally the surface of the wick impregnated with the fuel.

The principles here explained ought naturally to lead to the idea of directing similar currents of air, upon the flame of furnaces, by particular channels, never to be stopped, in order to compensate the insufficiency of the air, that passes through the grate where it is frequently stopped by the slags; another disposition, still more analagous to those lamps, consists in causing the smoke to pass through a narrow throat, which from its small surface and the heat of its sides, would not lower its temperature in any sensible degree, and to which place a continued current of air not disoxigenised, may be brought by means of other tubes, or channels. Thus the two conditions necessary for combustion, namely oxygen, and a certain degree of temperature, would be united in the current of smoke; and the combustible materials, which are suspended in this smoke, would of course be burned.

The authors mention that furnaces which burn their smoke, were used seven or eight years ago by Messrs. Clement and Desormes, in a manufacture of green vitriol at Paris, near de la Garre, and at their alum works at Verberie. M. Champy, junior, has also used them at the gunpowder works at Essone, and M. Montgolfier, assisted these gentlemen by his advice in the construction of these furnaces. M. Gemgembre, who constructed the furnace described at the mint, received his knowledge on the subject, by inspecting the labours of Messrs. Clement, Desormes, and Champy: who have all declared that they did not know of the inventions of Messrs. Robertson, or Mr. Watt of Britain.

In 1801, Messrs. Robertson of Glasgow, took out a patent for smoke-destroying furnaces. Their process consisted in introducing immediately over the fire place, a plate of external air, the thickness of which may be altered by means of a very simple mechanism, which regulates the distances of two inclined plates of iron, between which this plate of air passes. The space between those iron plates, communicates with the atmosphere by a horizontal opening made above the door, and against which the plates are placed.

The authors add, that it was known by hearsay that Mr. Watt, had long before the date of Messrs. Robertson's patent, occupied himself on the means of burning the smoke from steam engines, but they do not believe that he has published his inventions on that head, and assert that they should not have had any idea of his method of destroying the smoke, if

it had not been for a steam engine, constructed at Soho on his plan, which was brought over to Nantes, and erected there in 1796, under the direction of M. Leveque. The principal point in which the method of burning the smoke used in this engine, differs from that of Messrs. Robertson is, that in it the current of air is introduced under the grate, instead of above it, as in Robertson's engine: the first apparatus acts therefore with a direct flame, and the second with a reversed flame.

Remarks....The authors of this paper are entirely erroneous in their insinuation that Mr. Watt's method of constructing furnaces to burn smoke, had not been published at the time when Clements and Desormes erected their works. Mr. Watt took out his patent for furnaces which consume their smoke, in June 1785; and as the specifications of all patents are open to the public inspection at the patent office, this may be esteemed the date of the first publication of the contrivance. Besides this the specification of this patent of Mr. Watt's was published at large in the Repertory of Arts, vol. 4, p.226, in the year 1796, a work generally known; and of which there are evident proofs that it had long since found its way to Paris, in the copious extracts which are made from it in the French periodical works, particularly in the Annales des Arts, and the Bibliothoque Britanique.

Both Mr. Watt's furnace, and Mr. Robertson's were furnished with the *slow harrys*, which the French gentlemen propose as a *new* improvement to those of this description. On this occasion there are strong symptoms of their having suffered their *Nationalite* to get the better of their candour, in their endeavours to confer the honour of the invention on their own countreymen.

Besides the gentlemen mentioned, Mr. W. Thompson of Bow lane, London, published in 1796, an account of a furnace contrived by him for the same purpose, which may be seen in the same 4th volume of the abovementioned work.

The great use which inventions for making furnaces burn their smoke are of will be better illustrated by the following expressions of Count Rumford, than by any thing we could state on the occasion.

"The enormous waste of fuel in London may be estimated by the vast dark cloud which continually hangs over that great metropolis, and frequently overshadows the whole country far and wide; for this dense cloud is certainly composed almost entirely of *unconsumed coal*, which having taken wings from the innumerable fires of this great city has escaped by the chimnies, and continues to sail about in the air, till having lost the heat which gave it volatility it falls in a dry shower of extremely fine black dust to the ground, obscuring the atmosphere in its descent and frequently changing the brightest day into more than Egyptian darkness.

"I never view from a distance, as I come into town, this black cloud which hangs over London without wishing to be able to compute the immense number of chaldrons of coals, of which it is composed; for could this be ascertained, I am persuaded so striking a fact would awaken the curiosity, and excite the astonishment of all ranks of the inhabitants; and perhaps turn their minds to an object of economy to which they have hitherto paid little attention."

What Count Rumford observes here of London is proportionally true of all towns where coal is burned. In some large manufactories, and breweries the vast volumes of smoke produced are a public nuisance, to their vicinity; and when the means are now so well ascertained by which this evil might be obviated, there can be little doubt that on proper legal application, the owners of such works might be compelled to have the furnaces made so as to consume their smoke. A strong instance of this nature occurs at the near end of Oxford road, London, where the prodigious volumes of smoke that comes from a brewery, frequently involves the neighbouring streets, for half a furlong round, in such a dense cloud as to be extremely offensive to most of the senses of the passengers; what then must be the inconvenience, of those who live near it?

The method of burning the smoke at the mint at Paris above described, seems considerably easier of execution than any before published, and on that account is well worth notice.

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*On the use of Stahl's alkalized oxide of Iron, in Calico printing, by J. M. Hausman.**

M. Hausman makes great use of this dye in the preparation of printed calicoes; he endeavours to overload it with oxide of iron. In order to guard against precipitation, and to easily suspend the solution, he ties up the metal that is to be dissolved into a bundle, that he may take it out at pleasure when the nitrous acid is ready to flow over. For by employing this precaution when the bundle is taken out (after the effervescence, which produces a great heat, has sufficiently subsided) while an excess of acid remains, which is certainly necessary, a pigment will be obtained without any deposit.

If a sufficient quantity of fluid, consisting of three parts of calcined carbonate of potash of the shops, and of two parts of water, be poured into the nitrous solution of iron, there will, on stirring the mass (by which means it effervesces a little) be formed a magma; to which as much liquid carbonate of potash must be added as is necessary for its complete solution. This solution of iron gives, with a fifth or sixth part of gum water (prepared from equal parts of gum Arabic and water, and then thickened) ochery yellow colours which can be easily purified. The addition of a twelfth part of a decoction of yellow berries, with a twenty fourth part of a decoction of logwood, gives the tint known by the name of American colour: and a twelfth part of a décoction of logwood, without yellow berries gives a chocolate colour.

If this dye be diluted with a sufficient quantity of water, all the oxide falls to the bottom. When edulcorated filtered, and brought to a white heat in a crucible, this oxide polishes steel as completely as the English colcothar.

Linen or worsted yarn impregnated with this dye, and then immersed in a dye liquor prepared with caustic alkali, which precipitates the oxide of iron, acquires by this process a much darker yellow, than when it is left at rest for twenty four hours, and then dried, and washed.

Every drop of a solution of caustic alkali applied to this dye, precipitates from it a part of the oxide as it overcomes the carbonic acid. By these means it is completely decomposed; and this oxide, when washed, and exposed to heat for a sufficient time, gives a very fine polish too.

This dye is nothing else but a solution of hyperoxigenated carbonate of iron, by an alkaline carbonate which serves it as a vehicle; only care must be taken not to add too much when dark colours are required.

All solutions of iron sufficiently oxigenated, treated with an alkaline carbonate, in the same manner as the nitrous solution of iron, are capable of producing a similar dye.

A nitrous solution of copper, prepared from nine pounds of green oxide of copper, nine pounds of water, and three pounds of cream of tartar, with a solution of carbonate of potash, and treated as the nitrous solution of iron produces similar effects. When mixed with gum, and imprinted on woollen or cotton stuffs, it deposits the oxide of copper of a beautiful green tint. A gummed amoniacal solution of copper may be employed in its stead; for when the cloth is dried the ammonia is disengaged from it, and the green oxide remains united with it in consequence of its cohesion.

If linen or woollen yarn be soaked in nitrous or any other hyperoxigenated solution of iron, diluted with more or less water, and then be exposed for some minutes to a caustic alkaline ley, a beautiful nankeen colour will be produced. Instead of the nitrous solution, one more or less diluted of sulphuric acid may be employed. Many articles when taken from the caustic ley are dirty, but when they have attracted the oxigen of the atmosphere, they acquire the proper brightness. These colours pass to violet and black by maddering. They will acquire a deep black colour, as

* Inserted by particular request, from Phil. Mag. v.17 p.323.

well as different shades of grey, when treated with gallnuts, sumack, or logwood. Several blue shades may also be obtained from them by employing a ley of alkaline prussiate, or calcareous earth, oxigenated by any acid. The various shades of deep grey are produced by stronger or weaker infusions of gallnuts, which must be suffered to dry on the yarn impregnated with them; after which the yarn is immersed in sulphuric, nitric, muriatic, or acetic acid, diluted with water.

A nitrous solution of iron, when freed from its acid by evaporation, and brought to a white heat in a crucible, gives an oxide of iron, which is an excellent polisher of steel; a solution of iron in sulphuric acid has the same effect but in this case the oxide must be longer exposed to heat. A muriatic solution of iron may be employed for the same purpose; but the acid when evaporated by a strong heat, carries with it a large portion of the oxide. All methods in general by which iron can be sufficiently oxigenated, will produce an oxide fit for polishing steel.

M. Hausman having tried several years ago to oxigenate oxide of iron as much as possible, in order to convert it into acid, mixed together, in the course of several unsuccessful experiments, a pound of a nitrous solution of iron and half a pound of concentrated sulphuric acid. When the mixture was evaporated to dryness in a porcelain dish, there remained a white residuum, entirely insipid. On examining it several weeks after, he found it had attracted moisture and had assumed an astringent taste. A few weeks after this, when a certain portion of it had been disolved in the moisture which this residuum had attracted from the atmosphere, he poured off the liquor, which still had an astringent taste and preserved it in a glass. After some time he found in it very beautiful transparent crystals, which resembled alum. Having immersed it in an alkaline solution of prussic acid, its surface became covered with the most beautiful Prussian blue, which suffered itself to be removed by washing, without its colour being changed. This blue was reproduced as long as any of the crystals remained. In the air these crystals became yellowish, in consequence no doubt of the solar rays having disengaged from them a portion of oxigen, for Mr. Hausman found them afterwards on examination to be nothing else but the hyperoxigenated sulphate of iron. This salt is insufferably astringent. When diluted with a great deal of water a precipitate is produced, and speedier when the mixture is exposed to heat. The filtered precipitate had a most beautiful yellow colour. A high temperature however deprived it of its colour, as it by this lost its excess of oxigen.

On repeating this experiment Mr. Hausman always obtained the same result, and when he exposed the white insipid residuum, in a glass retort combined with a Wolf's apparatus, to such a degree of heat as brought it to a state of ignition, the acid was disengaged from it in the form of sulphureous and sulphuric acid, accompanied with a mixture of oxigen gas. The oxide of iron, obtained in the retort after the experiment, was of a brownish colour, and fit for polishing.

If the quantity of sulphuric acid be lessened there will be obtained, in like manner, a white pulverulent residuum; which, notwithstanding its insipidity dissolves in an equal portion of warm water; and after cooling, and being left some time at rest, produces crystals.

The hyperoxigenated oxide of iron obtained from Stahl's tincture of iron, or any other acid solution of the metal, when precipitated and again dissolved in sulphuric acid, with some excess of the latter, gives also beautiful crystals of hyperoxinated sulphate of iron.

The common sulphate of iron, which is oxigenated by nitrous acid, or by the absorption of nitrous gas, does not crystallise; and when the evaporation is not continued to dryness, acquires the consistance of syrup or honey. But if a fifth or sixth of concentrated sulphuric acid be added, a confused crystallisation is immediately produced which forms a compact mass. This proves that hyperoxigenated crystalised sulphate

of iron requires a greater quantity of acid than the common sulphate.

The muriatic acid becomes very strongly oxigenated when dissolved in hyperoxigenated sulphate of iron, which thereby acquires a yellowish colour.

The hyperoxigenation of iron increases its affinity for acids in such a manner that calico printers make no use of an acetic solution of hyperoxigenated oxide of iron, as it does not readily give up its acid by drying.

Account of the method of breeding fish used by Mr. Jacobi of Lippe county in Germany.

Hanover Mag. No. 3, and Phil. Mag. No. 34 p. 268.

Mr. Jacobi's apparatus for breeding fish is a large water trough, about twelve feet long which is fixed in a place where there is a water fall from a spring, which was conveyed through a small gutter into the trough so as to cause a great water fall. Upon this trough is placed a cover like the lid of a box, with several holes in it of six inches square, which are filled up with a wire grating, not only to admit air, but so close as to prevent the water mice from passing through, which follow close to the fish at spawning time and are very fond of the spawn. At the lower end of this trough, about five inches above the bottom, is a hole filled up with the same kind of wire grating and of the same size as that at the top, through which the water runs into a fish pond or canal, by which means the water in the trough is always five inches deep. In the bottom of the trough a kind of coarse gravel is laid, about two inches thick, such as is commonly met with in gravelly ponds. December is the spawning time for Trout or Salmon, at that season if a female fish is taken and her belly gently pressed and rubbed, she will part very freely with her spawn, without any prejudice The spawn is to be received in a bason of clear water; and the milt or soft roe of a male fish, procured in a similar manner, is to be stirred up well with it in the bason, which is to be carried to the trough before the water is let in; and the prepared spawn is then to be sprinkled very thin upon the coarse gravel; the water from the spring is then to be let into the trough, and nothing more is necessary to be observed at that time, but that the water may have a constant current through the wires, and that these wires be kept clear from filth: on the third or fourth day after, the trough should be opened, to inspect whether the spawn is not covered with slime, or nastiness; in which case the water is to be moved horizontally with a flat hand, tolerably briskly; which motion will clear the spawn from the slime, and at the same time turn the eggs. It will have the same effect if the roe is cut out from a female fish and the milt from a male fish, and mixed together in water, as when they are procured in the manner mentioned.

In this manner Mr. Jacobi annually breeds vast quantities of trouts, he has observed that as soon as the fish is out of the egg, it has on its belly a bladder, from which it receives its first nourishment, and which becomes every day less until it vanishes at last; so long as the bladder appears he suffers the young ones to remain in the trough, afterwards he lets them out in the pond to seek food for themselves. He has proceeded in the same manner with Salmon, and with the same good success. He has observed that the young fish can be distinctly seen enclosed in the pregnant egg of a trout in its last stage.

The time of the spawning of fishes differs somewhat every year; partly owing to the influence of the weather, or to the beds in which they spawn; some require hard and stoney, others soft and slimy, and others bushy bottoms, and some herbs and grass. Trouts will not spawn but on a stoney and gravelly bottom, although some creep under the roots of trees, and in hollows near the shore where they are sometimes so entangled that they may be caught by the hand; they avoid spawning there, but will return again to find a place where the water has a fall and runs briskly, and where there is a gravelly bottom. After they have chosen a place they will beat violently into the gravel, or coarse sand, till they make a deep hole, and so deep that it is frequently

to be seen the next day, notwithstanding the running stream. This shows what difficulty the trouts have in spawning, as they of all small fishes have the largest eggs; their spawning time also continues longer, and they frequently begin in November and continue till February. Many who complain of their success in breeding trout have not sufficiently considered that they require a hard gravelly bottom and hard water; when both these are wanting they cannot spawn; and if they do it turns to no account, and the old ones die soon. If they appear near the head of the entrance, and the surface of the water, it is a sure sign that the water is too soft for them.

Perches have much greater advantage in spawning, and seem to have no difficulty; they spawn against bushes, shrubs, and reeds, where it adheres: and when they cannot find any thing of this kind, they get near shore, where grass grows sometimes under water, and drag their spawn along the grass; the male following the female immediately and impregnating the eggs. When the weather is not very cold or stormy, the eggs quicken in three days, those eggs which fall on sand or mud come to nothing. Their time of spawning is in the beginning of spring.

Carps and carouches spawn but once a year, which is in summer; they part with their spawn without much trouble, and in all places, but the spawn does not thrive every where. The places which are proper for their spawning are full of weed or filth; for they require a clay bottom: a small spot in a pond is sufficient to breed vast numbers: the spawning ponds are full of weeds, and require to be cleaned annually, and the number of the young ones to be lessened. Without this care the young fry grow poor, get thick heads, and on their scales a glutinous substance which is called *grief*, and when they grow up are distinguished by the name of *stoney carps*, or stoney carouches. A good economist will never suffer any of these sorts to remain in his ponds longer than three years; and in a midling pond seldom above twelve female and three or four male carps or carouches. When the stone carps are put into the spawning ponds some tenches are put in along with them; and when the mitt of the male tench is mixed with the spawn of the female carp, it produces what are called *Spiegal* carps. It is believed that a fish is produced from the mixture of carps and carouches, and these are called hemelings; but this sort is not fit for breed, and when caught are generally among the class of white fish.

Eels pass down streams and rivers in autumn in great numbers to spawn in the sea; and vastly greater numbers of young ones ascend them in spring and summer. Their size varies between the largest and smallest darning needle. They are called *elvers* and abound in some rivers to an inconceivable degree. Bushels of them are taken in some places with baskets fixed to the end of a pole and drawn swiftly through the water.

Remarks....The art of breeding fish from their spawn, which is but new in Europe and as yet unknown in our islands, has been practised for ages in China, where the spawn is sold commonly in the markets, and they are so attentive to make the most advantage of it, that even the rice fields which are flooded for two or three weeks, have spawn thrown over them at that time, for the sake of the young fry produced in that short period. The small trouble attending the management of fish in M Jacobi's method, in proportion to the advantage, induces us highly to recommend it to such of our readers as have proper situations for it; which in most parts of Ireland are very numerous, particularly in Ulster, and well adapted for breeding Trout or Salmon; ponds could be formed at a small expence on several parts of the streams, where many hundreds of fish may be produced every year.

Accounts of the breeding of bream and pike contained in the original paper have been omitted for brevity, as being less interesting, and that inserted of the eels has been taken from another article in the same work, as preferable to what was stated of them in the first.

Ponds for rearing Eels would also

be very profitable, they are in the water, what swine are on land, and may be fed and fattened with the same food. The ancient Romans were famous for their ponds of this sort for several reasons, some of which are not fit to state here, on account of their inhumanity. The same sort of ponds would do for carp and tench as for eels, but it is doubtful whether it would be safe to trust them in the same water with them; perhaps herrings and other salt water fish, might be also reared in ponds communicating with the sea.

The short statement relative to breeding hybrid, or mule fish, deserves notice; perhaps some excellent varieties might be produced in this way; and no path in nature affords greater facilities for experiments of this nature.

DETACHED ANECDOTES.

IMPROVEMENTS OF CONDITION GIVES IMPROVED IDEAS.

ZAMOISKOI, a Polish chief, enfranchised six villages on his estates. While the inhabitants were mere serfs in a state of servitude, he was occasionally obliged to pay fines for their misconduct, for in a state of drunkenness, they would attack and sometimes kill passengers: since their freedom he seldom received any complaints against them. Upon signing the deed of enfranchisement, their benevolent master intimated some apprehensions to the inhabitants, lest, encouraged by their freedom, they should fall into every species of licentiousness, and commit more disorders than when they were slaves.—The simplicity and good sense of their answer is remarkable. "When we had no other property," returned they, "than the stick which we hold in our hands, we were destitute of all encouragement to a right conduct; and having nothing to lose, acted on all occasions in an inconsiderate manner; but as soon as our houses, our lands, and our cattle are our own, the fear of forfeiting them will be a constant restraint upon our actions."

The situation of the Irish peasant, is certainly preferable to that of the Polish serf, and yet in many places, particularly in the grazing countries, it is miserable enough. If their condition were bettered by a more liberal treatment on the part of their employers, and by a wise system of legislation, they would acquire a more enlarged way of thinking and acting, and riot and disorder would most probably be changed into peaceable and industrious habits. Happy circumstances would result from making the experiment. K.

THE FOLLY OF ANTICIPATION.

The following dialogue took place about 40 years ago, between a father and his son, a little boy in the parish of Derriaghy, in the county of Antrim.

Father, I will plant an orchard in the field adjoining the house.

Son, I will eat apples then in abundance.

Father, If you eat without my leave, I will whip you.

Son, I will eat.

The father enraged, beat the boy, who still obstinately persisted in his declaration of eating the apples. The father is dead many years, the son in his turn is advancing in years, but the orchard is not yet planted. Similar events often occur in life, we suffer much by anticipation—The dreaded evils never occur, or are found more easily borne than we expected: Thus we often unnecessarily multiply our perplexities, and increase their force by anticipation. K.

VENERATION FOR THE CLERICAL OFFICE ILL REQUITED.

Ferdinand II. Emperor of Germany in the 17th century used to say, "Did it happen that an angel from heaven, and a clergyman were to meet him at the same time and place, the clergyman should receive his first, and the angel the second act of his obeisance"—"Nothing on earth," writes his confessor, "was more sacred in his eyes than the priesthood."

Being deceived in a political negociation by a crafty ecclesiastic sent by Cardinal Richlieu for the purpose, the emperor changed his opinion, at least of Father Joseph, of whom he said, A wicked Capuchin has disarmed me by his rosary, and enclosed no less than six electors in his cowl."

CHURCH AND KING.

Immediately after the disgraceful riots at Birmingham in 1791, an English dignitary was called upon to drink the toast of Church and King. He addressed the master of the feast in the following terms: "Sir, I venerate the church, the holy offices of which I have been long accustomed to administer; I trust also that the whole tenor of my life proves that I honour the King, but I will not drink the toast of Church and King, for I well know what is the meaning of these words when they are put in conjunction.

Their meaning is a *Church above the State, and a King above the Law.* Against these principles I will protest to the latest moments of my life."

THE LAGAN CANAL SURPASSES GERMAN SLOWNESS.

Coxe, in his travels through Poland, Russia, Sweden and Denmark, relates, that on a canal in Germany, the bargemen employed eight days in coming from Lubec to Moellen, which is only 36 miles by land, and did not expect to reach Lawenburgh in less than eight days more. The Lagan canal from Belfast to Loughneagh, from the state of repair in which it is kept, and from the difficulties of a river navigation, more than equals the German delay; lighters are frequently detained several weeks on their passage to Loughneagh. It is related that some years ago a vessel from the port of Belfast sailed to the West Indies, and returned before a lighter, which set off at the same time for Lisburn, a distance of seven miles only by land, reached its destination.

EASY MODE FOR THE MINISTER TO RAISE PARLIAMENTARY SUPPLIES.

A housewife raises water from a pump, that is out of order, by pouring a quantity of water down the pump stock; this refreshment causes the sucker to play, and produces a copious stream. Places and pensions judiciously administered occasion great facility in procuring grants of the public money. Private wishes are gratified, and the public business is expedited—but all at the cost of the community. The public pays for all.

ORIGINAL POETRY.

THE GHOST OF MRS. DUFF,

WHO DIED IN CONSEQUENCE OF A BITE ON THE NOSE, FROM A FAVOURITE DOG. ADDRESSED TO MISS A. N. ON SEEING HER LAVISH HER CARESSES ON HER LAP-DOG.

'TWAS at the silent hour of two,
When cits are fast asleep;
And drunken rakes reel homeward to
The wives they left to weep.

When o'er her clay-cold tomb inclined,
The ghost of Mrs. Duff,
And in her coffin groped to find,
Her pellise, gloves, and muff.

Alas! no gloves, nor muff were there,
For ghosts are ne'er allow'd,
In aught to clothe their bodies bare,
But pall, or sheet, or shroud.

But as black velvet was the tip,
Her velvet pall she took,
And tuck'd it neatly round her hip,
Like a pellise to look.

And thus being drest, she on did jog,
As you may well suppose;
In her left hand she held her dog,
Her right hand held her nose.

Thrice shrill she scream'd, her pipes to clear,
Then gave a mournful cry,
While blazes blue thickly appear,
Streaming from either eye.

"Ah! what a wretched fate was mine,
Cut off thus in my prime,
Condemned in agonies to pine,
And die before my time!

"This dog, the author of my woes,
My love repaid with strife,
Through him I lost my precious nose,
Then lost my precious life.

"But love misplaced is always curst,
Of mine, ye maids, beware!

I with caresses brutes have nurst,
Which men would die to share.

"But for this folly, for this fault,
How hardly do I pay?
For dog love had I man's love sought,
I'd been alive to-day.

"Ye maidens all, who puppies love,
Don't let them come too near;
If their mouths near your noses move,
They'll make you rue it dear.

"And young men, of the puppy breed
Avoid the peevish sisters,
For if their tongues too close proceed,
You'll find them worse than blisters.

"And puppies too I would address,
But that do what I will,
Or e'er so well my thoughts express,
They will be puppies still.

"But hark! a voice that for me cries,
And will not be denied;
Come see ye maids, how low she lies,
For loving dogs who died!"

She ceased—Her form then slow dissolv'd,
And wasted more and more,
Grew pale, and into fume resolved,
Then vanished with a roar!

In sheets of fire red light'ning flash'd,
Along the furrow'd ground,
While peals on peals of thunder crash'd,
O'er all the welkin round.

NEMORENSIS.

ALTAMONT TO THE FALLEN MARIA.

FAR from the noise of passion's jarring strife,
With heartfelt melancholy let me stray;
There brood in anguish o'er a mis-spent life,
And gain at last the quiet heavenly way.

With steps of sorrow, shady paths to rove,
In silent solitude neglected roam,
There weigh the pleasures of unlawful love,
And call the sinful wish for ever home.

Curse on the wretch who with pretended truth,
First urged thee on forbidden joys to prove,
There tearing spotless innocence from youth,
He blasted all the sweets of virtuous love.

Oh! loved too well for my internal peace,
Though lost to honour, be not lost to shame,
Be firm, and bid the flattering villain cease,
Nor wound with more reproach your dying fame.

Remind him of your innocence and youth,
Your honour clear and spotless as the day,
How with fell aim he wore the mask of truth,
And how you fell an unsuspecting prey.

Though beauty triumphs in that youthful face,
And delicacy reigns through all thy form,
Yet lost alike to virtue and to grace,
The good lament you, and the just will scorn.

Reflect, Maria, on that awful hour,
When on the bed of death you taste of pain,
Your beauty's vanished like a summer flower,
And the stern king the lovely ruins claim.

For me, as heaven indulgent will forgive,
Oh! may there wandering thoughts be fixed above,
You, ruined nymph, for ever whilst you live,
Shall claim my pity, though you lose my love.

October, 1768.

MARIA TO ALTAMONT.

YOU wrote, and unobserved the lesson lay,
I bade the voice of calm reflection cease,
Nor cast a glance beyond the present day,
And bar'd my thoughts for ever from my peace.

At last conviction rends my tortured breast,
While former scenes add horror to the gloom,
With guilt, with anguish and despair oppprest,
I seek the silent solitary tomb.

Now, now my crimes in dread array appear,
Impending vengeance trembles o'er my head,
Too late I shed the sad repenting tear,
My peace is wrecked, and every hope is fled.

Will heaven regard the penitential tear,
When fell disease arrests each vital part,
Ah! no, strict justice will not deign to hear,
When only dread of justice rends the heart.

Oh! may the happy inexperienced maid,
Shun the first dawnings of unlawful love,
Reflect how poor Maria was betrayed,
And let my fate a timely caution prove.

Though man admires when deck'd in bloom of youth,
Be bless'd with virtue, charm beyond today,
Though beauty triumphs, yet endure this truth,
The clay built mansion hastens to decay.

I saw, I loved, was ruined and undone,
Wrecked for a while my virtue lost deplored,
In secret pined, unpitied and alone,
Nor ever sought the God I once adored.
Oh! Altamont thou blest of heaven farewell,
Ere this arives Maria is no more,
And while you listen to my passing knell,
I tread the gloomy and eternal shore.

REFLECTION.

PERDITION spreads her pleasing wiles
To draw the unsuspecting nymph astray,
Awhile she seems to tread enchanted ground,
But wanders far from virtue's narrow way.
The fond alluring dream at last is o'er,
A sea of black destruction opens wide,
A while beholds her trembling on the shore,
Then rising whelms her in its rapid tide.

APOSTROPHE,

OF THE SHADE OF BRIAN BOROMHU, TO HIS HARP.

Deposited in the Museum of Trinity College, Dublin.

A SOUND as of arms, to the high hall advancing,
Seem'd join'd with bold musick, as nearer it drew,
Illuming the long aisles, what quick flashes glancing
Through every casement, successively flew!
When lo! crown'd with shamrock, the wreath of true glory;
A sword in his belt, with its golden hilt gory;
While spread on a green robe his blest locks so hoary,
Approach'd the august shade of king BOROMHU.

"What changes have been," he exclaim'd soon discerning,
The mouldering HARP, he moved forward to view,
"Since I to my palace, from vict'ry returning,
Wak'd national airs as I strung thee anew,
Then ERIN was mighty, kept free by her king,
Her worth from all shores, saints and sages did bring,
My hundred bright bards, making youth scorn death's sting,
Renown'd the slain heroes who serv'd BOROMHU.

"But ERIN declin'd, and like nations unnumber'd,
Submitted to sloth, and to slavery too;
How rudely neglected for ages you slumber'd,
What barbarous ages were seen to ensue,
Base Ignorance courted his own degradation,
Dependence ensued, and the bards lost their station,
The GENIUS of ERIN gave up his laps'd nation,
And wept at the tomb of her friend BOROMHU.

"Oh! worth nought avail'd 'em, how oft the false tourist,
(His hosts ERIN's rich sons, his safe-guards her poorest)
Call'd men the most savage, and maids the impurest,
Whose lives were in heav'n prais'd to bless'd BOROMHU.

"I implor'd ERIN's GOD, and he said—
"Patriot spirit,
Go, influence thy people true taste to pursue;
Force scorn to be just, and grant wrong'd Irish merit,
Reward still when won—nor will claimants be few,
Hence, minstrels long silenc'd by prejudiced slander,
In primitive pomp shall my fav'rite isle wander;"
Then to ERIN GO BRAH, that in sweet, solemn grandeur,
Awoke on his wild harp, marched off BOROMHU. O.

Ballycarry.

EPITAPH,

ON MISS NEWTON.*

CAN Silent Wo of sharpest kind
Extort from apathy a Tear?
Can pity touch the unfeeling mind?—
Oh! then approach! But mark what's here!
Wild grief and mis'ry meet thy eye!—
Sad, comfortless, absorbed in thought,
A widow sits—a tomb hard by—
Her soul with bitter sorrow fraught.
Now catch the interrupted sighs—
The sounds that faulter on her tongue,

* The verses in the last number entitled "Kitty lovely blue eyed maid," were written some years previously for the same lady whose death is here lamented, what her personal charms and amiable character were, are obvious from these two tributes of the regard of the author, (who seems to have been duly sensible of both) without inserting his note; which if placed where he intended it would have much diminished the effect of his former very pretty composition. That the tomb and the ball-room should never appear together, a moment's reflection will convince his good taste.

My darling little ones, she cries,
Will pine in want—for, Kitty's gone!
She's gone! oh, Heavens! who? Kitty gone!
That softest, sweetest, gentlest form,
Lifeless extended, cold and wan,
Whom Nature grac'd with every charm.
Yes! in the dark, unconscious tomb,
The last abode to man assigned;
Where silence reigns and awful gloom!
The Blue-eyed Virgin's form you'll find
T.W.E.

SELECT POETRY.

STANZAS

TO THE MEMORY OF *ROBERT BOURNE** ESQ. BY DAVID CAREY, ESQ. AUTHOR OF "THE PLEASURES OF NATURE," &c.

He possessed a mind richly imbued with sound learning and Christian principles, joined to great and active benevolence, which could only be exceeded by that of his estimable friend, Dr. Robert Anderson, of Edinburgh, author of the "Lives of the British Poets," in whose house he had resided for some time, and who accompanied him on his visit to Ireland.

WHEN the Warrior expires on his path of renown
The tears of a Nation embalm his repose,
Though Mercy ne'er hallowed and Pity disown
The breast that ne'er felt her compassionate throes.

But when Worth, modest Worth, like a star beam that fell,
Is withdrawn to his own empyrean of light,
How few, ah, how few! round his cold earthly cell
Heave the deep sigh of sorrow, and weep for his flight!

Yet bosoms there are, O! the dearest, the best,
(And may heaven on their path shed its loveliest beams)
Who soothe the lone wanderer's pulses to rest,
And weep with a dear and a lasting esteem.

All such o'er thy doom, lov'd unfortunate BOURNE!
To sad sister shores, breathe the sigh of regret;
For thy virtues the Good and the Virtuous mourn,
Ah! memorials sweet! they shall never forget.

As some bark that has glean'd, as she travers'd the deep,
The gems of the Orient, the pride of the wave,
Hails, joyfully hails, lovely Albion's green steep,—
When loud roars the tempest, and deep yawns the grave;

So gaily we saw thee on Life's summer sea,
The regions of Science and Fancy explore,
Then seek each fond scene dear to friendship and thee,
And breathe thy last sigh on thy lov'd native shore.

When the blooms of thy mind, like the spring, met the eye,
How bright was the prospect that fancy pourtray'd!—
Now faded, ah! faded for ever, they lie.
Where the green turf of Erin now covers thy head!

And Friendship his fond ineffectual care
Bewails, as he lingers and sighs to depart;
And Piety weeps, 'mid her holiest prayer,
For a child that was lovely and dear to her heart.

'Tis thus as we journey Life's dark valley through,
Bright sun-beams of hope oft illumine the road;—
How brightly, alas! but how transient too!
For love, hope, and joy, find one gulphing abode.

But pass undismay'd, O ye righteous! the bound;
Though dim, mark the vista that opens afar!
On the ruins of Time, o'er the darkness profound,
Salvation has lighted her bright morning star;

And the Cherubim train their glad welcome extending,
Heaven's triumph recording, her loud organ blow,
For a soul from the confines of darkness ascending,
That has trod the lone blood-press of Death and of Wo!

*Fourth Son of the Rev. Richard Bourne, of Dublin, who died at Kildress, in the county of Tyrone, on the 8th of June, 1809, in the 24th year of his age.

Then weep not the pleasures so fading and dear,
For the handmaids of bliss in yon starry abode,
Shall wipe from your eyes the disconsolate tear,
And ray on your pathway the smiles of your God.

FOREIGN LITERATURE.

PROCEEDINGS OF THE FRENCH NATIONAL INSTITUTE.

THE class of mathematical and physical sciences has proposed the following prize question:

The first inquiries concerning sound, date very high in antiquity. The proportion of the length of strings producing different notes, are said to have been found by Pythagoras; but this branch of science made no remarkable progress before the end of the seventeenth century. Sauveur, a member of the French Academy of Sciences, showed by very ingenious experiments, that the sounding cord was divided into different waves, separated by knots, or points of rest, and he determined the absolute number of vibrations that constitute each note, deduced in the first place from delicate and curious experiments, which he compared afterward with the algebraic formulæ derived from the theory of the centres of oscillation; as appears in the memoirs of the Academy, for 1713.

Taylor, in his *Methodus Incrementorum*, published 1717, treated the problem more profoundly on the hypothesis, that the forces acting on the material points of the system are proportional to their distances from a right line drawn from one fixed point to the other, so that these points all arrive at the right line at the same time. Twenty or thirty years after this, Daniel Bernoulli, farther developed the theory of Taylor; but for the general and strict solution of the problem we are indebted to d'Alembert and Euler. These great geometricians first employed the differential equation of the motion of the sonorous chord, which is with partial differences, and of the second order. This equation was first found and summed up by d'Alembert, but Euler was more fully aware of its universality.

An equation of the same order is applicable to the oscillations of air in tubes, and does not change, when from the case of the simple line we proceed to cases of two or three dimensions.

In the problems of which we are speaking the order of the differential equation of the motion is connected with the manner in which we consider the effects of elasticity in the body moved. It has been here applied to a chord stretched between two points. If the chord be let loose at one of these points, and be perfectly flexible, it is incapable of producing any acoustic phenomenon.

It is otherwise if the chord be a spring. In this case, confining it if you please to a single fixed point, the spring set to vibrate will produce a perceptible sound, if its oscillations exceed twenty-four per second; but the differential equation of this movement will be of the fourth order. The first problem may be considered as a particular case of the second, abstracting the spring; but the converse does not hold.

This essential difference between the questions of the movement, considered in each of these points of view, in the case of a simple line, leads us immediately to conceive that we must find differences of the same kind, and also a great increase of difficulties, when we introduce two dimensions into the calculation. The acoustic phenomena produced by parchment stretched, as on a drum-head, are referrible to those of the chord; the phenomena of metallic plates, to those of the spring.

Euler, in his paper *de Motu vibrato rio Tympanorum*, has considered th parchment as composed of threa crossing each other at right angles. geometrician of the Institute has pu lished in one of its volumes some r searches into this subject, contemplati it in the same point of view. T differential equation of the moti

which is partial and of the second order, cannot be summed up, at least in finite terms.

In his paper *de Sono Campanarum*, Euler attempts to reduce the vibrations of hard surfaces formed by revolution to those of circular elastic rings, of which he considers them as an assemblage, situate in planes perpendicular to the axis of revolution, and supposing the effects of the vibrations to be a variation of the lengths of their diameters. He here arrives at an equation with partial differences of the fourth order, not summable in finite terms.

This is all that geometricians have hitherto been able to effect with regard to the problems of sonorous bodies, considered in the case of two dimensions, and even introducing simplifications, which, it cannot be denied, alter the natural state of things, so that the results of analysis cannot be applicable.

These hypothetical simplifications are particularly inadmissible in respect to vibrating surfaces of metal, or a substance naturally elastic. In the most simple case, that of a plane, it is obvious that Euler's hypothesis of the vibration of surfaces of revolution does not apply. We have not even the differential equations of the motion for vibrations of this kind, considering their phenomena as nature presents them; and to find these equations would be an interesting subject of meditation to geometricians, which would contribute equally to the advancement of natural philosophy and mathematics.

Happily Mr. Chladni has done for the vibrations of elastic surfaces what Sauveur did a century ago for the stretched chord. He has discovered and rendered perceptible, in a very ingenious manner, by the arrangement dry sand takes on vibrating plates, undulations with points of rest interposed. His majesty the emperor and king, who has seen the experiments of Mr. Chladni, struck with the influence that the discovery of a strictly accurate theory, capable of explaining all the phenomena rendered sensible by these experiments, would have on the progress of natural philosophy and mathematical science has desired the class to make it the subject of a prize, to be proposed to all the learned of Europe. The class accordingly announces it in these terms.

"To give the mathematical theory of the vibrations of elastic surfaces, and compare it with experiments."

The prize will be a gold medal of the value of 3000*f.* (125*l.*) to be awarded at the public meeting on the first Monday in January 1812. No work will be received after the 30th of September 1811.

We shall add an abridgment in our next of the report adopted by the class of mathematical and physical sciences, and that of the fine arts, on the 13th of February, and 16th of March 1809, on Mr. Chladni's work, concerning the theory of sound.

This treatise, published in German, in 1802, and about to be translated into French, contains every thing of importance in his first work, that appeared in 1787, besides considerable additions. Under the title of Acoustics; it is divided into four parts, which treat, 1st, of the numeral ratios of the vibrations of sonorous bodies; 2ndly, of the laws of the phenomena they exhibit; 3dly, of the laws of the propagation of sound; 4thly, of the physiological part of acoustics. The first contains little but what is already known. To determine the absolute number or vibrations in a note however, Mr. Chladni does not employ a chord, but a slip of metal fixed at one extremity, and long enough to allow the oscillations it makes in a given time to be counted. Their number is to that of the vibrations of another slip of metal, taking place in the same time, and under the same circumstances, in the inverse ratio of the squares of their lengths. In this part too, Mr. Chladni treats of the temperaments proposed by different persons. He prefers that adopted by Rameau, which renders the twelve semitones included in the octave, perfectly equal to each other, by making them answer to twelve geometrical mean terms, between the two extremes.

In the 2nd part we find the author's discoveries. He first examines the vibrations of chords and rods, and distinguishes three sorts, the transverse, longitudinal, and those which he calls gyratory. The first take place when a chord or rod is struck in a direction perpendicular to its length. But a rod that would produce a certain note when thus struck, would emit a very

different one, if rubbed with a piece of cloth in the direction of its length. If the rod be of glass, the cloth must be wet; if of any other substance, dry. These vibrations, which he terms longitudinal, he has found subject to the same laws in a solid rod, as the longitudinal vibrations of the air in an organ-pipe; and he has given a table of these vibrations for different substances, such as glass, metal, and wood.

Notes still different from these emitted in the two preceeding circumstances, are produced, when a rod is rubbed in a direction very oblique to its axis. Mr. Chladni gives the epithet of gyratory to the vibrations resulting from this kind of friction, because he supposes, that the particles of the substances receive a movement of oscillation round its longitudinal axis. He says he has found in these vibrations the numerical ratios are the same as those of the longitudinal vibrations, but that the tones of each rod are a fifth higher.

Each series of inquiries above mentioned, has been made with rods fixed at each end, rods meerly supported at one or both ends, rods fixed at one end and supported at the other, and rods loose at each end. Each of these circumstances occasions a difference in the results. Mr. Chladni has likewise examined the vibrations of curved rods, forks and rings. Euler applied the last species of vibrations to the phenomena of the sound of bells; but Mr. Chladni has shown very justly, that his hypothesis do not accord with nature.

The last two sections of this part are devoted to the vibrations of plates and bells, or plane and curved surfaces in general, a subject wholly new in experimental philosophy; and which, notwithstanding the striking regularity of the phenomena, has resisted the efforts of the able geometricians, who have attempted to treat on it.

Mr. Chladni has ascertained the places, which the tones we may draw from plates, by giving them different forms, and by causing them to sound in different methods, occupy in the musical scale. But these inquiries are particularly interesting when combined with those for determining the portions of each plate that have distinct and co-existing vibrations, and the remarkable curves that form their perimeters. For these experiments the plate, covered with fine dry sand, is to be held between the thumb and one finger, the ends of which press on directly opposite points of the two faces, while a bow is drawn over some point of its edge. Sometimes a third finger is applied at different points of one of the faces, to vary the results of the experiments. The point of support is always in one of the curves of equilibration. The figure of these curves, and their arrangement, depend on the position of the point of support, that of the point to which the bow is applied, and that of the different sounds we wish to produce by rubbing the bow in different ways on the same point. A change in either of these produces a correspondent change in the curves.

While speaking of these curious phenomena, we cannot avoid noticing a paper inserted in the first volume of the Transactions of the Italian Institute, entitled Inquiries concerning the Vibrations of Elastic Plates. The author, Mr. Paradisi, says in a note, that he was led to make his experiments by a passage in the Bibliothéque Britannique, where Mr. Chladni's were described. Having provided an apparatus, by means of which he could keep the plates fixed at any point of their surfaces without the assistance of the fingers, he first perceived, that the curves of equilibration did not arrive at settled figures, till after a gradual and continual succession of variable figures; the generation of which, being examined by him with great attention, led him to new deductions concerning the theory of these curves.

Thus, for example, if we take a rectangular parallelogram of glass, nine inches long, and three broad, fix it in the line of its longer axis, one sixth of its length from the end, and apply the bow to one of the longer sides of the parallelogram, at one third of its length; the lines in the sand, when come to a state of rest, will divide the surface into eight equal rectangles by a right line in the direction of the great axis, and three equidistant right lines parallel to the shorter sides. But Mr. Paradisi found, that on causing the plate to vibrate by a succession of very little touches with the bow, eight semicircles

were first obtained, the centres and diameters of which were placed symmetrically on the longer sides of the parallelogram, and the point of application of the bow was one of these centres. These semicircles gradually increase: those on the same side from being separate come into contact, and afterward penetrate into each other, leaving between them rectilinear lines perpendicular to the longer sides; and in proportion as these lines increase in length, the arcs flatten as they approach the greater axis of the parallelogram, with which they are at length confounded.

In other experiments Mr. Paradisi obtained whole initial circles formed on the surface of the plate, and semicircles with their diameters resting both on the longer and shorter sides of the parallelogram. The velocity of the grains of sand placed in the perimeters diminished in proportion, as the radii increased.

Mr. Paradisi applies the term of *centre of vibration* to the centre of the circle that forms round the point to which the bow is applied, and that of *secondary centres* to those of the other circles. Supposing afterward, that, when the system of curves is arrived at a fixed state, any given element of these curves is directed by the result of several forces, the actions of which emanate from these different centres of vibration, and are functions of their distances from the element of the curve in question, he arrives at a differential equation between the co-ordinates of this element, the summation of which would require the form of the functions, that represent the laws of the actions of the forces, to be known. He promises us farther inquiries on this subject in another paper.

We must refer to the memoir itself for his other experiments, among which are some interesting ones on changes in the fixed point, and in the point to which the bow is applied, without producing any in the figure or arrangement of the curves.

To return to Mr. Chladni, his second part concludes with reflections on the vibrations of bells, and of curved surfaces in general, and on the coexistence of vibrations in sonorous bodies. He speaks of the theory and hypothesis of Euler respecting the sound of bells; of Rameau's system of the fundamental base; of the musical system of Tartini, founded on experiments, which according to Mr. Chladni, were known in Germany long before Tartini made use of them, and which may be considered as the inverse of Rameau's; and lastly of the combination, which takes place in certain circumstances, of the vibratory with other kinds of motion.

In the third part the author first considers the propagation of sound as effected by the air and different aeriform fluids: he then examines the cases where it takes place through the intervention of liquid and solid substances. We find the experiments, which the author made in concert with professor Jacquir of Vienna, on the vibrations of various kinds of gas; and conjectures on the cause of the difference between the velocity of the propagation of sound through air, &c. and that given by theory. The committee conceive, that the two classes ought to bestow distinguished eulogiums on the discoveries of Mr. Chladni respecting the philosophy of sound; and that it is an object of importance, to direct the attention and emulation of the learned to those physico mathematical researches, to which his discoveries may give rise.

Signed, de Lacépède. Hauy, Méhal, Gossec, Gretey, Le Breton, de Prony.

Imperial Academy at Petersburgh.

The following prize subject is proposed by this Academy for the year 1810.

"To improve the theory of sluices, and thence to deduce rules for constructing these important works in the most advantageous manner; so that they may be used with all possible security and speed, be attended with as little expense as may be for their construction and for keeping them in repair, and incur no waste of the water required for the passage of loaded vessels more than is absolutely necessary."

And for 1811. "To give a complete comparative chronology, and, if possible, corrected and verified, of the Byzantine authors, from the foundation of the city of Constantinople till its conquest by the Turks."

The prize for each is 100 Holland ducats(£46,5), and the answers must be sent before the 1st of July in each year.

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MONTHLY RETROSPECT OF POLITICS.

THE Continent of Europe again enjoys peace, except at two of its extremities, the Russians and Turks are waging an unequal war, on the shores of the Black Sea and the Danube, while a more unequal contest is still carrying on in the peninsula of Spain, by a portion of that nation against the French. The emperor Alexander, flattered by receiving part of the Austrian spoils, almost without drawing a sword, is now left by Bonaparte to fight his battles against Turkey, while he himself is occupied for a time with affairs of nearer and more immediate concern. The Russians, indeed by themselves, would be fully sufficient to put an end to the Mahometan Government in Europe, but, if we mistake not, Napoleon will protract the period of its entire overthrow, till he shall be able to devote more attention to the arrangements arising from a matter of such considerable importance. He does not affect to conceal his sentiments respecting the Porte: her alliance with England, if continued, will assuredly accelerate her destruction, renunciation of that, and submission, may put off the evil day until a season of leisure, when negociation will accomplish the work as effectually as an appeal to arms.

The Speech of Bonaparte to the Legislative Body, at the opening of its session, may be considered as the formal public explanation of his sentiments and views, to the nation at large. We have mentioned his reference to Turkey: his opinion of Spain is given in few words, and with little qualification, must be the opinion of every impartial observer; that all appearance of opposition must speedily cease before the immense force that will soon overspread her territory. There has lately been some change made in the formation of the Supreme Junta; an Archbishop has been placed at its head, while the Marquis Romana is supposed to be the spring which regulates its motions. Under this semblance of ecclesiastical authority, a decree, which a few months ago would have been branded as sacrilegious, has been issued, to convert the church plate and some ecclesiastical revenues to the service of the state. This, together with the measure of arming all the inhabitants, and putting the whole means of the country in requisition, as is now rumoured to be done, is [illegible] late in being resorted to, as well as assembling of the Cortes, for the French will occupy the country before there is time for any of them to take effect

Our attention has lately been directed to the ability and enterprize said to be conspicuous in their generals, since the resignation of Cuesta, and the increased zeal and patriotism of the country since the withdrawing of our troops into Portugal. A general named Aresaga, whom we hardly recognize among the early champions of the Revolution, has been placed at the head of about 55,000 men, and "we go to Madrid," proclaimed here as the watch-word of his army, by those who advocate the mode adopted by the party in Spain, for resisting the French domination. The enemy's generals by superior conduct, have certainly prevailed upon him to advance incautiously within a few leagues of Madrid, but when they could entice him no farther, they fell upon him and almost annihilated his army; while two other armies advancing to his assistance, are also said to be beaten and dispersed. Thus have three generals commanding troops, conjointly, greatly exceeding the enemy, and who seemed each jealous of the others assistance in overwhelming him with destruction, been taken in detail, and almost rendered incapable of farther resistance.

A report which was some time prevalent, of a great naval victory having been obtained in the Mediterranean, has turned out to be the destruction of two French ships of the line, on their own coast, by themselves, in order to escape capture, and of a number of transports with stores, for the relief of Barcelona, in the bay of Rosas, by the boats of our fleet. We are sorry that Lord Collingwood, whose former modest and well written account of a great action we admired, should have blazoned forth this petty enterprize, as something eminently useful in counteracting the designs of the enemy.

Of Portugal, which *must* follow the fate of its neighbour country, we shall mention only one circumstance. Agreeably to the usual policy of the French of doing some thing to conciliate the inhabitants of any place they may be in possession of, they had during their late residence in Portugal, suspended, or perhaps abolished the court of the Inquisition; since our reoccupation of that country, this most hated instrument of tyranny and persecution has been revived, and is now a powerful engine in the hands of the governing party, for the destruction of their political adversaries. Is this the way that Englishmen take in these eventful times, to conciliate their allies, and advocate the rights of human nature among the nations?

When Mr. Jackson was sent to supersede Mr. Erskine in America, we much doubted the wisdom of the appointment, and especially when we heard the American prefix to his name, *Copenhagen* Jackson, and considered the influence which the disgraceful recollections that occasioned it, must have in the breasts of these high-minded republicans. Had our situation in regard to them been less critical, this mission would have marked an exceeding want of discrimination in the cabinet, but the choice of such a man, at such a time, to soothe irritation and soften a harsh and ungrateful measure—We want words to express our admiration at the little wisdom which must have produced it!

If recent information from New-york be correct, the event is such as might be expected; the American ministry disgusted at the ungracious conduct of Mr. Jackson have broken off all intercourse with him, and thus the breach with that country instead of being closed is unhappily widened and prolonged.

The wisdom of that policy by which our conduct towards foreign nations has been regulated for more than fifteen years, may now be fairly estimated by its effects. We need not bring forward the objects proposed at different times to be attained by those intrusted with the administration of affairs, during this long and arduous period, and how often they have varied, and how constantly been frustrated. This has repeatedly been done, and many endeavours made to impress on the public mind, that, when there were ample means to execute, constant miscarriage could only arise from a head altogether incapable to contrive. The same system is still continued, after all it has produced, and seems likely to produce, abroad and at home. We commenced the period alluded to with the world our friends, and if we cannot now entirely reverse the position, yet it would

be almost an absurdity to say that we have a single ally. When the prospects abroad are so gloomy, we might inquire if our condition is much improved at home. This is to us a consideration above all others important, when we may so soon have to seek in the improvements of this condition, for motives to animate us in a contest with a foreign enemy for our hearths and altars.

Continental politics are now nearly become a subject of curious speculation from which we should withdraw much of our attention; as we are not, or ought not to be deeply interested in any matter over which we have no possible controul. Therefore, as the sphere of action is greatly contracted, and the foundation narrowed on which we have formerly been principal performers, let it be made up by increased energy and attention to what still remains within our own power. The people of this country would do well to consider, that the whole continent of Europe, except perhaps the fortress of Gibraltar, will shortly be at the absolute disposal of a man whom we have loaded with all manner of abuse, and accused of every species of crime, but whom we allow nevertheless to be a most able and formidable enemy; and that this man, if war continues, will assuredly employ all his widely extended means for our destruction as a nation, and to effectually disable us from doing him future injury. The inquiry recurs,—are we prepared for this state of things? has the government such confidence in the country, the *whole* country; has each man that confidence in his neighbour, as to say—our enemies are numerous without, but we are united at home; our allies have left us by choice or necessity, we are deserted by the world, but we can depend on each other, and therefore have nothing to fear? Can *we* say—Our situation is enviable, all our disabilities are removed, our grievances redressed, our abuses corrected; we are exposed to no *legal* restraints *hostile* to the spirit of the constitution, our complaints are duly considered, and every attention paid to our comforts and even our prejudices, that we may become a happy people, unanimous in our determination to resist aggression and chearfully to risque our lives in defence of the superior happiness and advantages we enjoy? These are inquiries worth attending to; the answer to them is not a matter of small concern, but of the most vital importance, as on it may shortly depend our very existence as an independent people. We should endeavour to see the whole of our danger that we may be prepared to repel it: if there are defects in the social system under which we live, it behoves every friend to his country to give his active co operation in bringing them to light, and removing them, that complete confidence may take place between the government and the people, and between every individual in the community, ere the period arrives when safety *must* depend on unanimity.

ENGLAND

Symptoms of a return of public spirit are apparent. These symptoms have been accelerated by the views which the ministry have given of their incapacity and wavering. George Canning's letter to the Earl of Camden lets out more of their secret manœuvring. The plan fixed to day was changed tomorrow. No business could prosper under such direction. Their system of *four times changed councils* were, without doubt, also adopted in their plans, if such wavering can deserve the name of plans, for the campaign in Spain and Holland. As was to be expected, their schemes have miserably failed, disease in the pestilential swamps of Walcheren and the scarcely less noxious plains of Spain and Portugal has caused a distressing loss of lives, and added to the miseries occasioned by their ill concerted schemes. The people are indignant under such treatment, and the demand for reform is considerably strengthened by the perception of the blunders the ministry have committed. Distrust is openly expressed, that from the present constitution of parliament, an effectual examination will not take place, and hence arises an increased demand for a reform in the mode of returning representatives to the house of commons so as to give the people a greater check on their representatives. The Edinburgh reviewers who in a late

number had with much sophistry scouted the idea of reform, have in their last number retracted their former sentiments, and admit the necesity of reform, unless the house of commons institute a vigorous inquiry on their meeting. The business now comes home to every man. All ranks feel the increasing pressure of the times. The prices of all articles of domestic expenditure, of all the cloathing used by our families, and of the meat we use at our tables, are additionally enhanced by the weight of taxation occasioned by our unsuccessful and ruinous expeditions. The pressure of the times comes home to every individual, and he thus becomes interested in the cause of promoting reform.

The city of London are regaining their former spirit. Pitt by artifice and force almost completely succeeded in destroying it. The effects of his schemes still remain in part, the recovery is progressive, but it is likely to be accelerated by the distresses of the times. The present Lord Mayor, unlike his predecessor, favours the cause of the people. He and Sheriff Wood are not likely to be made baronets, but what is far better, they will most probably succeed in obtaining the approbation of their own minds, and the thanks of a grateful people. At a common council held on the 5th inst. a spirited address to the king praying for inquiry into the unsuccessful expeditions was carried by the majority of one; at another common council on the 13th, the original opponents of petitioning at all came forward, and succeeded in substituting a less strong address in the place of the one formerly agreed upon. But on the next day a common hall of the livery of London, the body of electors of which the common council are only the representatives in what may be called the city parliament, voted a strong and energetic address to be presented to the King. The address from the common council we lay before our readers with the king's answer among the official documents.

From the answer it appears that ministers entertain some hopes of being able to resist inquiry. It remains to be seen how they will be able to stand their ground on the meeting of parliament. On the 21st inst. the day of the annual elections for common council men, the elections decidedly preponderated in favour of the popular candidates, and the advocates for a thorough-going inquiry. Throughout the ensuing year it is hoped that the common council assisted by the patriotic Mayor, Thomas Smyth and Sheriff Wood will manifest that they will no longer be the supple instruments of the treasury but assert their independence. After the dreadful calamities we have suffered to have it avowed that ministers see no cause for inquiry ought to rouse the spirit of the nation, to instruct their representatives, at least such of them, as owe their elections to the free suffrages of the people. The representatives of rotten boroughs have no electors, with whom they can feel a sympathetic interest. What men buy, they think they have a right to sell, and such a state of things requires to be amended, that in a free parliament, the free voice of the people should prevail.

A change of cabinets without a parliamentary reform will be of no advantage to the country. Administrations cannot be trusted without effectual checks. The Fox and Grenville administration though so incomparably better than their successors, that it is almost degrading to form a comparison between them, were yet not free from making great blunders. The bringing of Lord Ellenborough into the cabinet was a grand mistake. In a free country it is always dangerous to blend the functions of a judge with the courtly manners of the cabinet. The decisions of a judge should be above suspicion, and he should be untramelled by any circumstance in the remotest degree affecting his independence.

Our readers will also find a speech of Robert Waithman at the common hall worthy of their perusal. This upright man has long advocated the cause of the people in the common council in the worst of times: We trust his powerful abilities, and virtuous independent sentiments will soon have fuller scope, and his services receive some reward by his becoming

one of the representatives in parliament for the city of London. We hear this event will probably take place on the first vacancy. While the minions of power are so amply rewarded, the people should shew they can be grateful. The return of Sir Francis Burdett free of expense by Westminster is a glorious example to electors.

As a proof of the liberal disposition of Bonaparte to encourage an improvement in the state of the French nation, and by the salutary infusion of instruction to give content to them, the following observations selected from the close of a report of a committee of the Institute of France on the progress of the sciences from the epoch of the French revolution in 1789 to 1808 by order of the Emperor with his answer may be admitted in evidence. The report is throughout highly encomiastic and contains not a little of the boasting so congenial to the French character, but it is evident such liberal sentiments as follow would not have been used, if it were not well known they would be agreeable to Napoleon. He is as much aided in his views of aggrandisement, or ambition, call it what we please, by the victories which he obtains over men's minds, as well of the French, as of the nations he overruns, as by his military prowess and his potent armies. When will the old governments learn the obvious lesson, that well timed concessions and needed reforms are the best securities for stability, and increasing the happines of both rulers and people by satisfying the just demand of the latter?

The committee thus address their potent chief. "To lead the human mind to its noble destination—the knowledge of truth; to diffuse sound ideas amongst the lowest classes of the people; to withdraw men from the empire of prejudice and passions; to constitute reason as the sovereign arbiter and guide of public opinion; such is the essential object of the sciences; thus it is that they concur most powerfully in the advancement of civilization; this is what ought to secure to them the protection of governments, who wish to render their power immoveable, by founding it on the common welfare,

THE EMPEROR'S ANSWER.

Gentlemen, presidents, secretaries, and deputies of the first class of the Institute.

"I desired to hear your report on the progress of the human mind during these last years, in order that what you might have to state, may be heard by all nations, and reduce to silence the detractors of our age, who, endeavouring to cause the human mind to retrograde, seem to have for their end the extinction of it. I wished to know what remained for me to do, in order to encourage your labours, and to console myself, for not having it in my power any longer to contribute otherwise to their success. The good of my people, and the glory of my throne, are equally interested in the prosperity of the sciences.

My minister of the home department, will report to me on your demands, you may rely constantly on the effects of my protection."

Such language, let it be uttered by whom it may, is deserving of applause. On the subject of education "among the lowest classes," we have much to imitate, and on such points false shame should not cause us to blush in receiving instruction, though from an enemy. It would be happy for the old governments if by anticipating Bonaparte in salutary reforms they wrested from him one of the engines, which so forcibly aids him in the countries he attacks. If the Spanish nation should be forced to submit to him, they will at least have the consolation of being relieved from the oppressive and intolerable yoke of the inquisition.

Yet let us not be taxed as general or indiscriminating admirers of the French ruler. As friends of liberty we have much against him. Although we shall not descend into unmanly scurrility, and count it unjust to withhold such praise, as may be justly due to him, yet with the energy of freemen undazzled by his splendid qualities, we shall not hesitate to point out the injuries sustained by the glorious cause of liberty under his rule. If he encourage the sciences,

he seeks to render them subservient to his view of turning the people's attention from their political state, and lays an interdict on free inquiry, cautiously preventing by means of his literary guards bold truths from reaching the ears of the French nation. A translation of Fox's most valuable historical fragment, a lasting monument of his patriotism, and sound political feeling, has lately been translated into French, but care has been taken to expunge those passages, in which the principles of liberty are so energetically displayed.—A proof at once of the intrinsic excellence of the original work, and of the fear which prevails lest the spark of freedom should be again kindled in the breasts of Frenchmen.

It is a subject of gratulation that Lord Grenville has carried his election for the chancellorship of the University of Oxford; in opposition to the influence of the ministerial candidate Lord Eldon. Although some allowance must be made for the fears some of the electors arising from the tottering condition of the present administration, influencing their votes, yet we are willing to hail this circumstance as in some measure a triumph over bigotry. The cry of No Popery was revived against Lord Grenville, and the strength of the ministry was staked on the issue of the election. Liberality triumphed, and the University of Oxford shewed itself superior to the popular cry. We refer to the documents at the end of this article, for a manly dispassionate address from the friends of Lord Grenville on the occasion.

We congratulate our readers on the well directed and successful attempt of Sir Samuel Romilly, to lessen the number of capital convictions by his bill, passed last session, to change the punishment of privately stealing from the person, into transportation for life, or for seven years, or to three years imprisonment in penitentiary houses. He made this first attempt as introductory to his plan for gradually lessening the lists of crimes, for which the punishment of death is awarded. We rejoice that in this *iron age*, when "the soldier and his sword," stand so prominent as objects of almost undivided attention, this humane voice was attended to. Transportation, in the present state of our population, affords almost the only probable chance of reclaiming those incorrigible offenders, who amid the temptations of old habits, are in these countries likely only to repeat their crimes, but who in a thinly settled country, and in a different state of society, might possibly be brought to change their habits. Death has been called the most economical punishment, but an enlightened legislature will never weigh the expences of transportation, even if they should amount to 200*l.* a piece, against the probability of reclaiming from vice, the unhappy victims of error. Much is spent in useless expenditures, in pensions, sinecures, and enormous salaries. Let these be retrenched, but let none grudge the cost of attempting to rescue the unhappy convict from that state of misery into which he has plunged himself. Such penuriousness would be sordid indeed. The punishment of death is so indiscriminately awarded, as to defeat the effect intended.

Colonel Wardle has not succeeded in his prosecution for a conspiracy against Mary Ann Clarke and the Wrights. No grounds appear for retracting the opinion formerly advanced, that throughout this business the the honour of the Colonel has not been impeached. If like Francis I. he have lost every thing, he may also add, "but not my honour." In the course of the trial there is assertion against assertion, and near the close an attempt was made to give the preponderance against him, by adducing the evidence of an attorney, who was engaged on the opposite side. Colonel Wardle may probably have made some promises to induce the slippery lady to give her evidence, and we know informers are every day paid, but no specific promise to pay for the furniture to the Wrights appears to be substantiated. Besides we find Mrs. Clarke was taken out of the hands of the Colonel, and a higher bribe given to suppress that correspondence corroborative of her evidence, for the sale of which the Colonel might expect she would have been more honourably reimbursed. The

Colonel in his letter to Lord Ellenborough, has, with admirable coolness and perspicuity, pointed out the strong parts of his case, and shown how much may be said in his favour. Meetings have been held in London and other places to raise subscriptions to indemnify the Colonel for the expences he has incurred in the public service. This is honourable. He who puts himself forth in the cause of the public, should be indemnified against trick and quibble. The investigation which he brought forward was of more importance, and had greater effect in opening the eyes of the nation, to our real situation than all the enquiries respecting the unsuccessful expeditions. The latter were calculated to serve the interest of a party, and to effect a change between the ins and the outs: the former was displeasing to all parties, but went radically to the sources of the evils of our situation.

The Duke of York sat on the bench with the judge, during the trial, although he may be almost considered as a party in the cause. Had he no friend to intimate to him that an attempt to put on a bold face is no proof of innocence? The people have already pronounced a verdict on his conduct, grounded on the corroborative evidence, which came out in the course of the investigation, and consequently not to be reversed by any conduct of an unprincipled woman, who, throughout the business was credited no farther than her testimony was essentially and irrefragably supported by collateral unquestionable authority.

The disputes between the managers of Covent-garden Theatre and the people, are at length happily settled. A business trifling in itself became at last a matter of considerable political importance. The rates of admission did not deserve so much public attention. The impropriety of private boxes, and shutting up so much of the theatre from the use of the public, savoured too much of exclusive privilege. But the business was highly aggravated on the part of the managers. Hired bruisers were introduced into the theatre, and when these failed, recourse was had to severe legal prosecutions, and to a host of Bow-street runners to conquer the people. One spirited individual, Henry Clifford, a respectable barrister, had the public spirit to interfere, and commenced an action for false imprisonment, against one of the retainers of the theatre. A jury contrary to the slavish doctrine, advanced by Serjeant Shepherd in the defence, that a jury should find a verdict according to the law laid down by a judge, gave 5*l.* damages to the plaintiff. The managers thus defeated, presently submitted, and the upright decision of a jury put an end to a series of prosecutions, and to a business, which though of no real interest or importance in its rise, threatened to make great encroachment on British liberty. We have one more instance of the vast importance of trial by jury to the liberties of a country.

It is of great importance to have judges really independent. All men are fallible, and power vested in few hands is liable to be abused. There is a leaning to the side of power; a prince, by his presence on the bench, may appear to wish to influence; state policy may cause a judge to express a fear that public opposition to the managers of a stage may lead to the subversion of government; and another terrified by some appearances, may declare "that these are not times to show unusual lenity to rioters." But if juries do their duty, liberty is safe; to them we look for our security, while they discharge their highly important functions with moderation, just discrimination, and a dignified assertion of their rights.

We have now, in the course of our labours, arrived at the close of the year 1809, a year in which many occurrences have taken place to mark the present times, and entitle them to the character of *a deplorable crisis.* The year was ushered in by the miseries sustained by our army in Spain, and the battle of Corrunna, a contest in which much was suffered, and nothing gained. Then followed a session of parliament, in which many foul practices were discovered, in which much was proved, but no effectual means were taken to prevent the recurrence of such shameful transactions, and a woman highly

immoral, was useful in bringing to light many manœuvres in the present system of governing. Her evidence, incomplete in itself, and certainly deserving of no more credit than is due to a common informer, was remarkably corroborated by the production of facts, to which she afforded a clue, and by a defence most injudiciously conducted, with matchless impudence and hypocrisy. Uninstructed by the prior misfortunes from which even the caution and genius of Sir John Moore could not protect, another army is sent to Spain. A dashing general penetrates into the heart of the country, unsupported with the means necessary to maintain so advanced a position. A title to the general, and a profuse waste of human blood, are the unprofitable results of a victory at Talevera, for in a few days the British army was compelled to retreat, or to adopt the courtly phrase of the general, *celerity of movement* was necessary, and to leave the hospital to the humanity of the French, while they afterwards remain in inactivity and obscurity. To close the series of disasters and blunders, a large armament was sent to Holland, and a short possession of the island of Walcheren, is the only recompense for the thousands of lives lost by an unhealthy climate. While all these things are carrying on abroad, to consummate the evils of our situation, our ministers are trying to supplant each other in the cabinet, and two of them fight in the field. An attempt is then made to patch up an administration, and the Marquis of Wellesley is brought from Spain to infuse vigour into their councils. Judging of the past, and sorrowfully anticipating the future, we may say of such affected and ill adapted vigour,

"Curse on their *vigour*, it has undone their country."

Such is the review of the past year. During the revolution of twelve months, the crisis of our fate has rapidly advanced. What another year may produce is unknown, but we cannot flatter our readers with a speedy prospect of better days. All now is gloom!

IRELAND

Is ingloriously silent. With the exception of the Catholics endeavouring to reclaim their just rights, all is a dead calm. Not a breeze is stirring to drive away the fogs of our political atmosphere.

OFFICIAL DOCUMENT.

THE CITY ADDRESS.

The following Address was read by the Recorder:

TO THE KING'S MOST EXCELLENT MAJESTY,

The humble, loyal, and dutiful Address and Petition of the Lord Mayor, Aldermen, and Commons of the City of London, in Common Council assembled.

Most gracious Sovereign,

We your Majesty's most faithful, loyal and dutiful subjects, the Lord Mayor, Aldermen and Commons of the City of London, in Common Council assembled, most humbly approach your Majesty's sacred person, in the perfect assurance that your Majesty will graciously condescend to receive the suggestions of your faithful and loyal Citizens, on subjects which seriously and deeply affect their interests, in common with the rest of your Majesty's people.

We have witnessed with deep regret the disastrous failure of the late Expedition, as the magnitude of its equipment had raised the just hopes and expectations of the Country to some permanent benefit.

And we cannot avoid expressing to your Majesty the sorrow and indignation with which we are affected, by the unhappy dissensions that have prevailed among your Majesty's Ministers, and our fears that such dissensions may prove eminently prejudicial to the best interests of the Nation.

Your Majesty's faithful Citizens, actuated by loyal attachment to your Sacred Person and Illustrious House, and solicitous for the honour of your Majesty's arms and the dignity and solidity of your Majesty's Councils, are deeply impressed with the necessity of an early and strict Inquiry into the causes of the failure of the late Expedition, therefore pray your Majesty will direct inquiry to be forthwith instituted, in order to ascertain the causes which have occasioned it.

Signed by order of Court,

HENRY WOODTHORPE.

To which Address and Petition his Majesty was graciously pleased to return the following Answer.

I thank you for your expressions of duty and attachment to me and to my Family.

The recent Expedition to the Scheldt

was directed to several objects of great importance to the interests of my Allies, and to the security of my dominions.

I regret, that of these objects a part only has been accomplished.

I have not judged it to be necessary to direct any Military Inquiry into the conduct of my Commanders by Sea or Land in this conjoint Service.

It will be for my Parliament, in their wisdom, to ask for such Information, or to take such measures upon this subject as they shall judge most conducive to the public good.

PUBLIC OCCURRENCES.

BRITISH.

A shocking accident happened in Duke-street, Oxford-street, on Monday evening, to the child of Mrs. Fawell. She had gone down from her apartments in the absence of her servant, to answer a knock at the door, leaving her only child, a fine boy about three years old, in the rooms On returning again she was alarmed by her sons shrieks, and found the child so much burnt, that he expired soon afterwards. He had taken a news-paper off the table and lighted it by the fire, which was the cause of the catastrophe.

Wednesday, Dec. 20, at three o'clock in the afternoon died, at his house in St. Paul's Church-yard, Mr. Joseph Johnson, bookseller, being more than 70 years of age. He was an ornament to the profession in which he was engaged, and would have been an ornament to any profession. He was a man of a generous, candid and liberal mind; he delighted in doing good; the worthy and necessitous had reason to bless the warmth of his heart, and will long continue to regret his loss. He was on all occasions ready to apply his time and his thoughts for the benefit of others; and for his integrity and clearness of his views, was the perpetual resort of all his connections in seasons of difficulty and embarrassment. His understanding was of the best and soundest nature; and though he was the very reverse of every thing assuming and ostentatious, yet those who knew him best, and were most able to estimate his talents, will readily bear testimony, that they never heard him say a weak or foolish thing, or indeed any thing that would have discredited the lips of the wisest of his contemporaries. Accordingly his table was frequented through successive years by a succession of persons of the greatest talents, learning and genius; and the writer of these lines can chearfully bear witness that all were delighted when he took his share in the conversation, and only regretted that the gentleness and modesty of his nature led him to do it so rarely. He was always found an advocate on the side of human nature and human virtues, recommending that line of conduct which springs from disinterestedness and a liberal feeling, and maintaining the practicability of such conduct.

DOMESTIC OCCURRENCES.

IRISH.

ULSTER.

Married.....On the 24th ult. at Echo Lodge, Daniel M'Neil, esq. eldest son of Roger M. H. M'Neill, of Ballylesson, in the county Down, esq. to Jane, eldest daughter of the late Thomas Bumberry Isaac, esq. of Holywood House, in said county.

John Fitzpatrick, esq. of Carlingford, to Mary, youngest daughter of the late M. Harrold, esq. county Limerick.

At Dromore, Mr. Samuel Boyd, of Lisburn, to Miss Henderson, daughter of the late Rev. W. Henderson, of Rathfryland.

Mr. James M'Glure, to Miss Fowler, both of Armagh.

Mr. D. Hervey, Nursery, near Comber, to Miss Margaret M'Cullough, Rathgill.

In Belfast, Mr. William Falloon, to Miss Barklie.

In Dundalk, Mr. Owen Kelly, to Miss Ivers.

William B. Hamilton, esq. of Rockvale, near Dromore, to Catherine, daughter of Mr. M. Moreland, of the Lodge, Belfast.

Died....At Portaferry, Mrs. Eliza Dickson, aged 93 years.

At Glenarm, a few days since, Mr. W. Crawford.

At his house, near Belfast, the Rev. R. Dobbs, aged 58 years.

On the 85th year of her age, Mrs. M. Bennet, of Belturbet.

LEINSTER.

Married....Francis Dillon, esq. of Coolbuck, county Westmeath, to Ann, eldest daughter of the late Philip Lilly, esq. of Drumboe, county of Sligo.

Mr. John Smith, of Dolphin's-barn, tanner, to Miss Ann Walker, youngest daughter of Mr. Richard Walker, of Mylerstown, county Kildare.

Mr. James Egan, of Trinity-place, to Mrs. Vaughan, esq. Widow of the late Arthur Vaughan, esq.

In Kilkenny, John Anderson, esq. to Miss Jane Gore, daughter to the late Captain Henry Gore, of the 24th Dragoons.

On the 7th inst. Thomas MacNalty, esq. of Dominick-street, to Eleanor, youngest daughter of Mr. George Whitaker of Barrack-street.

In Great George's-street, Rutland-square, Dublin, the Rev. Francis Baker, Vicar of Bulrothery, to Henrietta, eldest daughter of Henry Baker, of Malahow, county Dublin, esq.

At the house of Thomas Meade, esq. Merchant's-quay, Dublin, John Magrath, esq. of Nenagh, to the agreeable Miss Fennell, niece to Mr. Meade, and sister to Captain Fennell, of Limerick.

Edward George Battersby, esq. of Bobsville, county Meath, to Elizabeth, eldest daughter of the late Rev. William Regan, of Kilvemmon, county Tipperary.

In Drogheda, Mr. Daniel Barnwell Hithcock, of North-quay, to Miss Daly, of West street.

Mr S. Salmon, eldest son of William Salmon, esq. Anglesea-street, to Miss Dunlevie, only daughter of the Rev. T. B. Dunlevie, of Cashel.

Mr. Joseph Mullen, to Miss Mary Taylor, of Clarence-street, North-strand.

Francis Mooney, esq. of Aungier-street, to Miss Vernon of Great Britain-street.

Died....At her house in Granby-row, Mrs. Ann Weldon, relict of Walter Weldon, esq. of Rahin, in the Queen's county, and daughter of the late Sir S. Cooke, Bart.

At the house of Henry Deane Grady, esq. Merrion-square, Mrs. Grady, relict of Standish Grady, esq. of the county Limerick.

In Bridge-street, Mr. John Langan, most sincerely and deservedly regretted by a numerous acquaintance.

In North-Anne-street, Mrs. Fausset.

In Eccles-street, on the 22d ult. Mrs. Dickinson, wife of Mr. Joseph Dickinson.

On the 7th inst. much regretted, after a tedious illness, Charlotte Jenath, daughter of Edward Clarke esq. of Palmerstown.

In Mountjoy-square, in the bloom of life, Mrs. Livesay, after a tedious illness.

MUNSTER.

Married...In Youghal, Mr. Lawrence Eams, of Castlemartyr, to Miss Boles, daughter of T. Boles, esq.

John Cantrell jun. esq. of Wellmount, county Tipperary, to Miss Leet of Merchant's-quay.

Mr. John Knash, of Knockroe, county Limerick, to the amiable Miss Elizabeth Hare, of Cross, county Tipperary.

In Waterford, Jesse Hartley, esq. to Miss Penny, of Dungarvan.

Died...At Burris in Ossory, on the 2d inst. the Rev. G. P. Piercy, aged 26.

At Nenagh, Mr. Timothy M'Namara.

Suddenly, at the house of Joseph Cox, esq. Mount pleasant, county Clare, Miss Lucas, daughter of Charles Lucas, esq.

On George's-quay, Limerick, Mr. Edward Houlehan.

On the 18th inst. after a few days illness Convers D'Arcy, esq. of Aughalinny, county Limerick, aged 63.

At Fort-Union, county Limerick, Mr. John Potter.

At Clonmel, Miss Anne Dillon, daughter of Mr. Walter Dillon, merchant.

At Clonmel, Sarah White, one of the Society of Friends.

At the advanced age of 102 years, Mary Stapleton, of Knockrow, county Kilkenny.

In Cork, Mrs. C. Flinn, relict of Mr. James Flinn, late of that city, ship-broker.

At Youghall, in the prime of life, after a few hours illness, the wife of Mr. Joseph Seymour.

At his house in George's-street, Limerick, Stephen Long, esq.

At his residence, Wood Road, near Castle Connell, after a tedious illness, Mr. Pat. Carey.

CONNAUGHT.

Died....At Crega, county Roscommon, sincerely regretted, Mrs. M'Dermott, wife of C. French M'Dermott, esq.

At Drumsna, on the 26th ult. Patrick Walsh, esq. most sincerely and deservedly regretted.

AGRICULTURAL REPORT.

From 20th November, to 20th December, 1809.

THERE is generally so little business to be done in the farming line during the winter months, that they afford scarcely any thing for an agricultural report. The principal business in which the farmer can employ his servants and horses, is ploughing the lea grounds intended for spring crops.

The long continuance of dry weather has been extremely favourable for that purpose, and it is to be presumed the farmers have generally availed themselves of it, to lessen the quantity of spring labour, and to turn up the land designed for potatoes, flax and turnips before the frosts set in.

The wheat crops generally look well for the season, and it is supposed a larger quantity has been sown than usual.

The prices of that grain have not fluctuated much, and the complaints of its quality, and the flour produced from it, do not seem to abate.

Barley has advanced in price considerably, but oats and oat-meal have experienced little alteration.

Turnips in some places are a good crop, in others, they have failed much; and the writer of this report apprehends there is not the usual number of cattle feeding this season.

By an account from Carlow, it appears that wheat and barley have advanced a little; oats and potatoes were declining in price, and butter in little or no demand.

COMMERCIAL REPORT.

MUCH as ill was to be feared from the blunders of Administration in their negociations with the United States of North America, few were prepared to anticipate so complete a rupture, and the rumoured return of the British negociator. But such is the progress from bad to worse, and such are the steps by which a great empire is reduced, when the management of their affairs falls into incapable hands. Added to our military miscarriages, our commerce is now likely to suffer again, from the effects of an ill-judged rupture with America. Direct war, or, more probably, a stricter enforcement of the non-intercourse, or, perhaps, also of the embargo system, will disturb the operations of trade, and open afresh the uncertain contingencies of speculation. Trade suffers most essentially by these fluctuations, and after a stoppage of this kind does not regain its former peaceable banks for a considerable length of time. American produce of all kinds has considerably advanced, and may be expected to advance still higher, although probably it may not reach the speculation-prices of last year. The losses then sustained may perhaps teach caution, and vessels occasionally violating the restrictions in America may afford a casual supply, though on terms enhanced by additional freight, insurance, agency, &c.

Most of the linens bought last year on speculation, still remain in the warehouses in London, unsold. The linen trade was materially deranged by this speculation. The prices of brown linens advanced so rapidly that the purchasers of white goods declined to buy on the high terms, and a very considerable portion of the present year's stock, especially of the finer kinds remains unsold. An unexampled stagnation in the linen trade has been the consequence, to the great injury of the country. If it afford any consolation, the speculators suffer with others, and there is little prospect of their golden dreams being realized. Coarse linens being the object of immediate demand, sell well.

Hopes are entertained that we may have a more adequate supply of flaxseed for next season, from the large quantities of Riga seed lately imported into London, and from some which may be likely to come from America through neutral ports, and also from the supply of seed saved in this country, of which, the quantity, especially in the hands of the small farmers, is stated to be pretty considerable. Doubts, however, are entertained, whether much advantage has arisen, on a fair average from the attempts to save seed, owing to the unfavourableness of last season, or even whether in common years, at the usual price of seed, the scheme of saving seed will be of national advantage. Some calculate that the amount of flax injured by the attempts to save the seed, was equal to the value of the seed saved.

A second seizure of 10,000 guineas which were exporting to the continent of Europe, for commercial purposes, is stated to have lately been made in the river Thames. The unfavourable rate of exchange with the Continent, of which one cause is the depreciation of our paper currency occasions these attempts. Guineas have generally disappeared and the few in circulation are at a premium, while the silver coinage is in a miserable state. In the year 1793, on an examination made at the tower in Lon-

don, the depreciation on the several kinds of silver coin in circulation was then found to be

	£.	s.	d.	
Crowns were less in intrinsic than nominal value. .	3	8	6½	per cent.
Half crowns.	10	19	9	
Shillings.	32	12	6	
Sixpences.	62	0	8	

Since that period, the silver coinage is much worse. In Ireland we ran the same course, till from the wearing of the silver, and by the artifices of coiners, who found it so profitable and easy to imitate a debased coinage, a miserable substitute was given in the bad silver issued by the bank of Ireland, in tenpennies, fivepennies, &c. These were also easily imitated, and when the period of their depression comes in its turn, the public will probably suffer as much as they did in 1805, by the bad shillings. Such are the injuries sustained by having a depreciated circulating medium; the people in the end become heavy sufferers.

Exchange during this month has been pretty nearly at the same rates as last month, or about ¾ per cent lower, and discount on bank notes also from ¼ to ½ lower.

In the commercial Report for last month, at page 404, *10th line from the bottom, for "ready," read* reedy.

NATURALIST'S REPORT.

From November 20, *till December* 20.

I would not enter on my list of friends,
(Though grac'd with polished manners and fine sense,
Yet wanting sensibility) the man
Who needlessly sets foot upon a worm.

The sum is this. If man's convenience, health,
Or safety interfere, his rights and claims
Are paramount, and must extinguish theirs.
Else they are all—the meanest things that are,
As free to live, and to enjoy that life,
As God was free to form them at the first,
Who in his sov'reign wisdom made them all.

COWPER.

Did man only make use of his powers of destruction in self-defence, and take the most speedy and efficacious means to terminate the tortures of the animals on which he inflicted death, the most rigid moralist might justify the act.

The first and most important object in the study of the natural history of animals is, after having distinguished and characterized the species so as to convey our knowledge to others, to attend to their manners and instincts, in order that we may turn their valuable qualifications to our advantage, and be able to defend ourselves against the bad propensities of others, and it requires little observation to perceive that insects strong from their numbers, are among the most powerful enemies to man, and that notwithstanding the most regular attention on his part, and constant predatory warfare carried on by his useful allies the birds, many species multiply so rapidly as to bid defiance to his utmost art, should he neglect for a very short time to exert his skill to destroy.

In the year 1788, at Kennington, in England, a fine white down was observed adhering to the branches of apple-trees, which was soon found to be followed by a remarkable excrescence, and on examination by some Naturalists, the cotton-like substance proved to be the covering of a small insect of the Linnæan genus, Coccus or Cochineal, and the excrescence to be caused by their perforation of the bark, various means were tried for destroying them by washes and fumigation, but without success, and they have continued to increase, so as now to threaten destruction to all the apple trees in the kingdom. As that insect has made its appearance on some apple trees in the neighbourhood of Belfast, supposed by the importation of a single one from London, it is worth making the attempt to stop its progress. The most effectual method of destruction is rubbing the part affected with a stiff brush. The insect on being bruised gives out a purplish liquid which stains the finger, they are protected by their downy covering from being injured by either cold, or moisture, and seem by its means to elude also the prying eyes of birds.

From the non-appearance of those birds of passage, which usually visit us before severe winters, and the mildness of the weather for some time past, it is highly proba-

ble that the winter may pass without any very severe weather. This has however been but an uninteresting month, the stormy and wet weather which has prevailed has prevented the singing of even those few birds which often enliven this dreary season, during which mosses and lichens alone flourish.

METEOROLOGICAL REPORT.

From November 20, till December 20.

The months this season almost seem to have changed their characters, October and November appeared not as the forerunners of winter, and it is only during this month that winter has appeared with the usual attendants of floods and tempests. Those curious transitions from frost to rain, which are mostly prevalent before the permanent frosts of January, have, for some time past, been the daily weather; and it is worthy of being remarked how suddenly the change takes place in a very short time; from a clear sky and freezing atmosphere, clouds overcast the horizon, and rain falls, which again in as short a period clears away, and frost again commences, this, when the sun rises (as the people say takes the air) and rain again begins to fall, all these varieties might lately have been observed during 24 hours.

November	21, 23,	Showery days.
	24,	Pleasant dry day.
	25, 28,	Showery.
	29,	Fine dry day,
	30,	Showery.
December	1, 5,	Showery.
	6, 7,	Dry.
	8, 9,	Wet and stormy.
	10,	Showers.
	11, 15,	Snow showers.
	16,	Great rain and high floods.
	17,	Dry day
	18,	A shower in the evening.
	19,	Dry.
	20,	Rain most part of the day.

The Barometer has been mostly 29. It was on the 22d, 23d and 28th of November, and 8th December, as high as 30, on the 15th it was as low as 28,1.

The Thermometer was on the 6th of December, as high in the morning as 51, on the 9th, 49. On the 28th of November, and December 17, it was at 30, and during the rest of this period it was seldom above 40.

The wind has been observed 10 times Northerly, but the prevalent wind has been S.W. having been observed 18 times in that direction.

CELESTIAL PHENOMENA,

FOR JANUARY, 1810.

1st. The Moon rises at half past 3, in the morning, to the east of the first star of the Virgin, and is soon after followed by the first of the Balance.

5, Is new Moon at 14 min. past 3 P.M. but, as she is nearly five degress north of the ecliptic, or Sun's apparent annual path, there cannot be an eclipse at this time.

10, The Moon passes the meridian at 22 min. past 4, P M. the two eastern of the four stars in the square being above her, but a little to the east of the meridian. Jupiter is at some distance to the east of her, but Mars at a far greater below her in the western hemisphere. At six she is 68°. 38′. from Aldebaran.

15, She rises at 53 min. past 0, afternoon, is in the meridian at 14 min. past 8, having above her to the West the Pleiades, and much nearer, but below her and to the East of the meridian, Aldebaran with the Hyades. She sets at 24 min. past 3 the next morning.

20, The Moon is full, but without an eclipse as she is too far North of the ecliptic. She rises under the two first Stars of the Twins and nearly in a line with them, her brilliancy confounds the small Stars in the crab near her, and we can notice only the two first of the Twins, the first and third of the less Dog, and the first and third of the Lion forming the chief Stars in the groupe around her.

25, She rises under the five Stars in the triangle of the Virgin, being nearest the 7th of this constellation, which is above her. She is followed of course by the first of the Virgin but at a considerable interval. This night we may observe that she is nearly at equal distances from the second of the Lion and the first of the Virgin.

30, She may be seen near the first of the Scorpion, and is soon followed by the first star of Saturn.

Mercury is an evening star, and at his greatest elongation on the 31st, of course he is too near the sun to be visible during the former part of the month, but at its close he will be upwards of an hour and half above the horizon after sun-set.

Venus is a morning star, but precedes the sun only an hour and twenty minutes on the 1st, and her duration above the horizon before Sun-rise is daily decreasing, and her greatest height at sun-rise is only about nine degrees.

Mars is an evening star being about three hours and a half above the horizon after sun-set, on the first, and this duration is daily decreasing. An hour after sun-set we shall see him in the upper part of the lower region, near south west by south.

Jupiter is on the meridian on the 1st at twelve minutes past 6, P.M. and on the 19th at two minutes past 5. His motion is direct through 3¼ degrees, passing under the small stars in the middle of the band of the Fishes. The Moon passes him on the 12th.

Saturn is a morning star, and his duration above the horizon, before sun-rise, on the first is nearly two hours and a half, and their duration is continually increasing. The Moon passes him on the third.

Herschell is a morning star to the west of Saturn, and consequently longer above the horizon, before sun-rise. The Moon passes him on the first.

ECLIPSES OF JUPITER'S SATELLITES.

1st SATELLITE. *Emersions.*				2d SATELLITE. *Emersions.*				3d SATELLITE.							
DAYS.	H.	M.	S.	DAYS.	H.	M.	S.	DAYS.	H.	M.	S.	DAYS.	H.	M.	S.
2	16	46	49	1	15	33	54	1	4	36	55 Im.				
4	11	15	53	5	4	52	1	1	6	45	2 E.				
6	5	44	50	8	18	10	8	8	8	39	23 Im.				
8	0	13	54	12	7	28	9	8	10	46	52 E.				
9	18	42	51	15	20	46	12	15	12	42	30 Im.	* *First Satellite Continued.*			
11	13	11	55	19	10	4	12	15	14	49	20 E.	22	4	5	59
13	7	40	52	22	23	22	12	22	16	45	25 Im.	23	22	34	54
15	2	9	57	26	10	23	23Im	22	18	51	34 E.	25	17	3	59
16	20	38	52	26	12	40	12E	29	20	48	55 Im.	27	11	32	55
18	15	7	57	29	23	41	26Im	29	22	54	29 E.	29	6	2	0
20	9	36	54	30	1	58	10E.					31	0	30	55

Look to the right hand.*

TO CORRESPONDENTS.

In consequence of some complaints imputing blame where it was not justly due, made by Correspondents, on account of the determinaton relative to the admission of their Communications not being announced as speedily as they could wish, we beg leave to state that the admission of papers is generally determined at the Monthly Meeting of the Proprietors of the Magazine, at the beginning of each month, and that consequently *no other person* can give any information on the subject till after that period.

The answer to M. D. C's paper by K, has been received.

The Epitaphs sent by E. W. E. are not sufficiently correct for publication, his other favour is inserted, and we will be obliged by his description of Bagnal's-town.

Letters from a friend to civil liberty; from S. from Revicam; from Mr. Williams; from O; the epistle to Doctor Fell, and the remarks on a passage in Addison by Benevolus have been received.

The verses sent by A, seem as unfit for our pages, as for his, they shall however be submitted to the decision above-mentioned; with the other favours received.

In consequence of the gentleman who composes the Medical Report, being absent from town, we are under the necessity of deferring it.

Some Political Documents which should have appeared in this Number, from the quantity of other matter, are unavoidably postponed to the next number, In which, also, the Index to the present volume, and the Title Page, shall be inserted.

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